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EVALUATION OF THE GRIFFON GET WELL PROGRAMME

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INTRODUCTION

Canadian Force Joint Publication (CFJP) 5.0 states that, "The process used to prepare plans and orders for CF operations is called the CF OPP." However, in the same paragraph, CFJP 5.0 goes on to say, "This planning process is applicable to all aspects of the employment of military force not just war fighting."[1] This paper uses an example of a non-war fighting aspect of the military force, that of the declining serviceability rate of the Griffon helicopter in 2011, to evaluate if the CF OPP is in fact well suited to military events outside of traditional operations. 2011 represented a tough year for Griffon helicopter operations. In the preceding year, 1 Wing had personnel and assets supporting an Aviation Battalion in Afghanistan and a 6-pack for Operation HESTIA in Haiti. Domestically, all remaining Griffon units supported Operation PODIUM, the Canadian military security support to the Vancouver Winter Olympics, as well as Operation CADENCE, the Canadian military support to the G8/G20 meeting in Muskoka/Toronto. It represented an unprecedented pace of operations for the Griffon fleet, a pace that left the fleet broken and non-operational by the end of 2011.[2] The maintenance burden placed on the aircraft to meet those operations was overwhelming and a plan was required to get the Griffon fleet back to a state where it could meet the operational needs of the Canadian Forces (CF). This paper will describe the steps from the Operational Planning Process within the CFJP 5.0 which the 1 Wing A4 used to solve the

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[1] Canada. Department of National Defence, *B-GJ-005-500/FP-000, Canadian Forces Joint Publication 5.0 (CFJP 5.0), The Canadian Forces Operational Planning Process (OPP),* (Ottawa: DND Canada, April 2008), 1-1.

[2] Col K. Whale. (2014, Apr, 15), *CO's Town Hall Brief*, Power Point Briefing presented at 400 Tactical Helicopter Squadron, Borden, ON.

serviceability issues of the Griffon helicopter and how he adapted the doctrine to produce a plan, the Griffon Get Well (GGW) Operational Design (OD), to get the fleet back on its feet. This paper will then conduct a comparison against conclusions that came out of our syndicate discussions on OPP and ODs to show that using OPP for such an event offers many of the same advantages but also pitfalls as traditional operations. This paper will conclude that the OPP has advantages and disadvantages, but can still be a good tool outside of war fighting.

BACKGROUND

In 2011, the year the tactical helicopter community completed its operational tours in Afghanistan, CH146 Griffon Serviceability was at an all-time low. Maintenance was impacting force generation (FG) and force employment (FE) in CH146 Griffon community. Availability was approximately 40 helicopters (of 83) and serviceability was approximately 55% at best.[3] The situation was demonstrated graphically at Figure 1. Additionally, it was well know that technician experience levels were low. At that time, the backlog of maintenance was ever-growing and could not be solved by contracting out maintenance. The problem caught the attention of generals in the Air Force. The A4 1 Wing, LCol Marc Rodgers and the CH146 Weapon System Manager (WSM), LCol Jim Rossell, were tasked to turn this situation around.[4]

As a result, the problem solving tool they chose to tackle this situation was the CF OPP. Actually, the OPP was not their tool of choice for solving this problem; however,

[3] Col K. Whale, (2014, Apr, 15), *CO's Town Hall Brief*, Power Point Briefing presented at 400 Tactical Helicopter Squadron, Borden, ON.

[4] LCol Marc Rodgers, Interview, 15 May 2015.

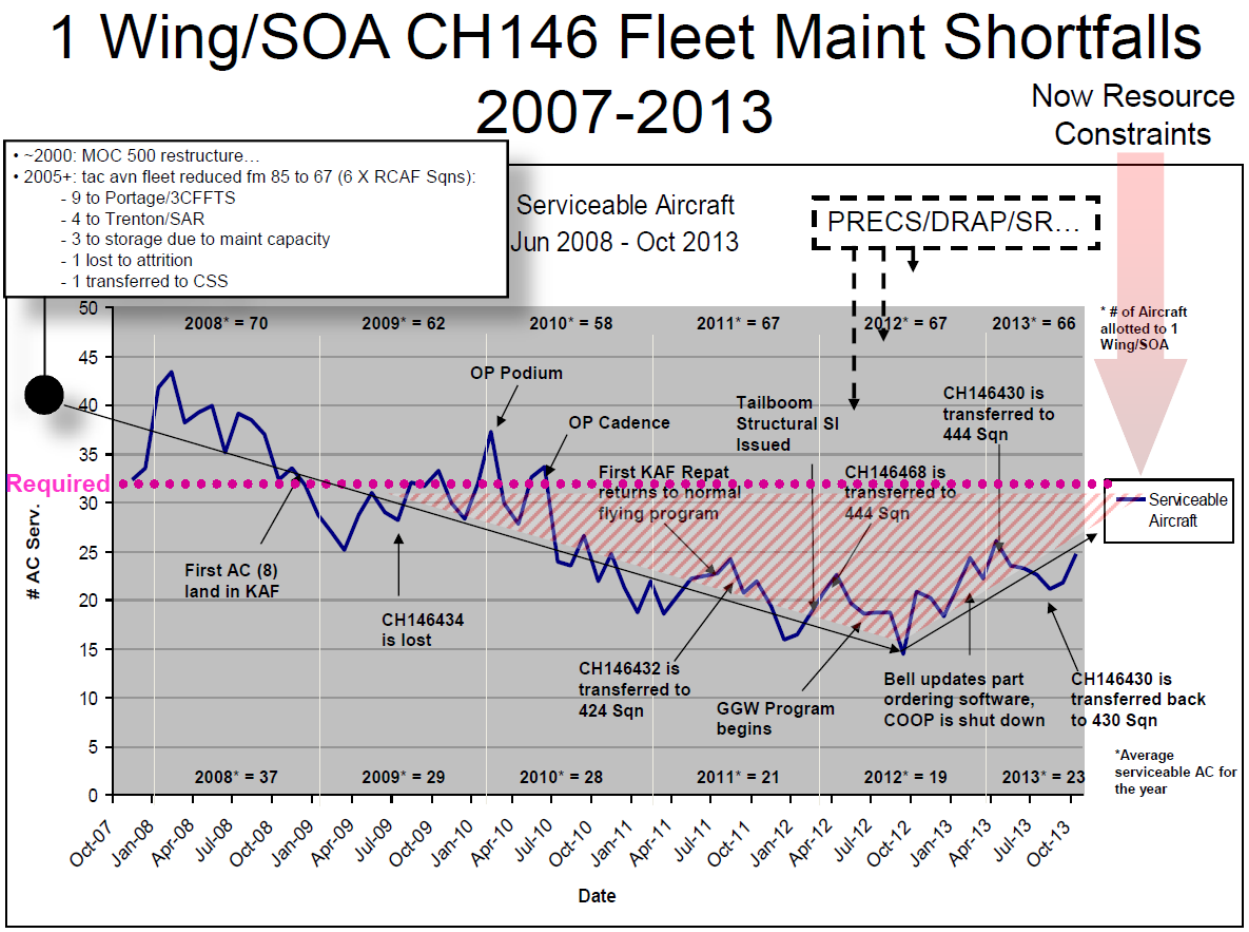

Figure 1 - Excerpt from CO's Town Hall Brief dated 15 April 2013 by Col K. Whale

the Deputy Commander (DComd) of 1 Canadian Air Division (1 Cdn Air Div), BGen St-Amand stated he wanted an OD. LCols Rodgers and Rossell were unsure if this was the right tool for the job; however, both had recently completed the Joint Command and Staff Programme and agreed that they could attack the problem using this process. They felt it did offer up one significant advantage in that an OD provides a great tool for communicating the problem and the plan required to tackle it. They felt the greatest importance was that an OD was something to which all senior officers are familiar.[5]

[5] LCol Marc Rodgers, Interview, 15 May 2015.

In discussion with LCol Rodgers, not only was an OD developed, but they followed the OPP in its development. Of course, the OPP is focused on a traditional operations against the enemy, so only higher level concepts within CFJP 5.0 were followed, i.e. Initiation, Orientation, Course of Action (COA) Development, Plan Development and Plan Review.[6] The following paragraphs will describe the activities within these steps and how they were applied towards the GGW OD.

CANADIAN FORCES OPERATIONAL PLANNING PROCESS

Initiation

CFJP 5.0 states, "Operations planning may be initiated at varying levels in response to either political or military events."[7] In the case of the GGW program, initiation was by the DComd 1 Cdn Air Div.[8] He questioned the 1 Wing Comd why serviceability was so low; the question was then posed to the 1 Wing A4, LCol Rodgers. There was no initiating directive; in this case, initiation was in response to a military event, that of a broken fleet and the impact it was having on FE/FG. LCol Rodgers did some preliminary investigation on cause factors and found the problems were very complex (similar to today's military operations). With direction from BGen St-Amand that he wanted an OD showing how 1 Wing was going to solve this situation, LCol Rodgers activated a planning staff. In the CFJP 5.0, it states the planning staff may include higher and subordinate formations to provide the planning staff. In the case of the GGW, some input was received from subordinate units, but he chose his planning

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[6] LCol Marc Rodgers, Interview, 15 May 2015.

[7] Canada. Department of National Defence, *B-GJ-005-500/FP-000, Canadian Forces Joint Publication 5.0 (CFJP 5.0), The Canadian Forces Operational Planning Process (OPP)*, (Ottawa: DND Canada, April 2008), 4-2.

[8] LCol Marc Rodgers, Interview. 15 May 2015.

staffs primarily from those that had sufficient expertise to assist in solving the problem and those that were stakeholders to the successful future of the Griffon. The planning staff included personnel from Bell Helicopter, the CH146 Griffon WSM staff, the Directorate of Technical Airworthiness and Engineering Support (DTAES) staff, and his own 1 Wing staff. Apart from the specific direction found in CFJP 5.0, LCol Rodgers did not form this team on site, but members provided input from afar and over time.[9]

Orientation

CFJP 5.0 states:

> On receipt of an initiating directive, a commander must orient the staff towards the requirements of the new operation. This is where the commander must place his personal energies to ensure that subsequent activities are focused. However, the commander should be careful not to confine the thinking process of the staff."[10]

As per above in the Initiation phase, a team was not collected so the traditional method for a Mission Analysis was not conducted. However, many of the activities conducted in the Orientation phase were carried out, that of a review of higher level assumptions/constraints/restraints and tasks, as well as development of own facts, constraints/restraints tasks, objectives, risks and timelines. As per the initiation phase, members provided information from afar and over time. It was during this phase, rather than being given the end state (which really was the ability to have the number of aircraft serviceable to achieve the required FE and FG), the end state of 62 aircraft available and a 65% serviceability rate by September 2014 (with a projected hope of increasing serviceability rate to 70% by June 2015) was established. These numbers were based on

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[9] LCol Marc Rodgers, Interview, 15 May 2015.

[10] Canada. Department of National Defence, *B-GJ-005-500/FP-000, Canadian Forces Joint Publication 5.0 (CFJP 5.0), The Canadian Forces Operational Planning Process (OPP)*, (Ottawa: DND Canada, April 2008), 4-4.

the Yearly Flying Rate (YFR) required to meet FE and FG requirements and the number of aircraft needed to fly that YFR.[11]

COA Development

CFJP 5.0 states, COA development "provides the necessary direction and guidance to the planning staff to continue the estimate process and shape the development of the initial COAs."[12] COA development for the GGW represented the largest departure from OPP doctrine. The factor analysis was basically a brainstorming exercise as to the main issues affecting serviceability of the fleet. These, were in turn analyzed to determine the significance of the factor, the ability to come up with a solution (or Decision Point (DP)), and how much in terms of improvement in serviceability/ availability along with expected timelines was achievable. There were no multiple COAs developed. Instead of Enemy COAs, risks to the plan were discussed (financial, resources, etc.).[13]

Plan Development

CFJP 5.0 states, "An approved plan or OP O will be the final product of the planning process."[14] After the above stage, LCol Rodgers produced a draft OD as the plan requested of him for the GGW. That being said, BGen St-Amand was not happy with the length of time to achieve the desired end state. As a result, the time-frame was

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[11] LCol Marc Rodgers, Interview, 15 May 2015.

[12] Canada. Department of National Defence, *B-GJ-005-500/FP-000, Canadian Forces Joint Publication 5.0 (CFJP 5.0), The Canadian Forces Operational Planning Process (OPP)*, (Ottawa: DND Canada, April 2008), 4-8.

[13] LCol Marc Rodgers, Interview, 15 May 2015.

[14] Canada. Department of National Defence, *B-GJ-005-500/FP-000, Canadian Forces Joint Publication 5.0 (CFJP 5.0), The Canadian Forces Operational Planning Process (OPP), (*Ottawa: DND Canada, April 2008), 4-13.

compressed to produce the final version of the GGW OD (Figure 2[15]). LCol Rodgers realized that the end state, compressed as such, could still be successful, but only if everything went as planned and when planned. He knew the likelihood was extremely remote, however, that the direction was provided by higher authority.[16] Of note, the GGW end state is soon approaching in June of 2015.[17]

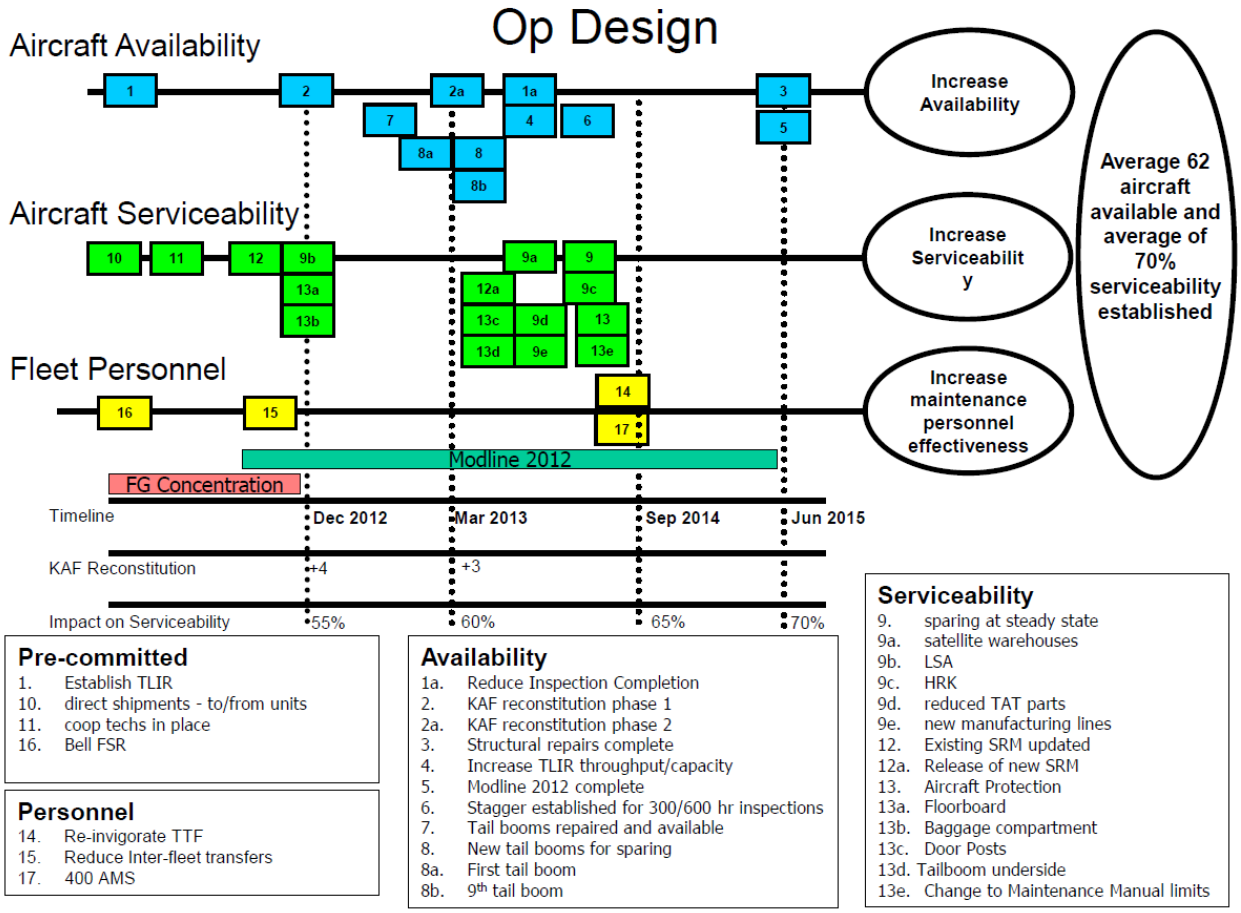

Figure 2 – Griffon Get Well Operational Design

[15] Col M. Barker, (2012, Jul, 9), *CH146 Get Well Plan, Vector Check*, Power Point Briefing presented at 1 Canadian Air Division Headquarters, Winnipeg, MB.

[16] LCol Marc Rodgers, Interview, 15 May 2015.

[17] Col M. Barker, (2012, Jul, 9), *CH146 Get Well Plan, Vector Check*, Power Point Briefing presented at 1 Canadian Air Division Headquarters, Winnipeg, MB.

Plan Review

CFJP 5.0 states, "A Plan/OP O must be reviewed regularly to evaluate its viability."[18] The plan for the GGW spanned over the space of three years. Updates were given on a weekly basis as to where they were with respect to achieving the end state; however, neither review of the plan itself nor an alternation of the plan was conducted. During that timeframe many circumstances changed that affected successful progress of the plan (e.g. reserve policy changes, freeze in YFR, freeze in postings, financial claw backs, adjustments to priorities, and command changes, changes in maintenance concept, operational tempo increase, and further degradation of aircraft systems).[19]

ASSESSMENT OF THE USE OF CF OPP FOR THE GGW

LCol Rodgers used the CF OPP and OD, only due to the fact that his superior commander requested that it be the tool used. We are now at the end state for the GGW. Although it has achieved some success, it has not met the desired end state. In September 14, 46 aircraft were available with a 54% serviceability rate. Much improvement has been witnessed in the past six months and as of now, 55 aircraft are available with a 64% serviceability rate, but seems to be levelling off.[20] That being said, as anticipated, not everything went according to plan and many DPs were completed very late or not at all. Does the fact that the GGW did not meet its end state mean that CF OPP was not the right tool to be used for such a non-war fighting event as the serviceability problem with the Griffon Fleet?

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[18] Canada. Department of National Defence, *B-GJ-005-500/FP-000, Canadian Forces Joint Publication 5.0 (CFJP 5.0), The Canadian Forces Operational Planning Process (OPP), (*Ottawa: DND Canada, April 2008), 4-13.

[19] LCol Marc Rodgers, Interview, 15 May 2015.

[20] LCol D. Taylor, (2015, May, 15), *1 Wing CUB 15 May 2015*, Power Point Briefing presented at 1 Wing Headquarters, Kingston, Ontario.

Command and Operational Planning

CFJP 5.0 states:

> The exercise of command is the most important activity in the CF, whether in peace or in conflict, throughout the continuum of operations. Of itself, command will not ensure success or victory. It will not drive home a single attack, destroy an enemy target, carry out an emergency re-supply nor conduct a campaign. At the same time, no operation will be successful without effective command.[21]

The importance of a commander was evident in the development of the GGW OD. However, as stated above, command must drive this plan through to its end state. Since the inception of the GGW OD, all of the commanders involved (DComd 1 Cdn Air Div, Comd 1 Wing, A4 1 Wing) have been posted to new positions. Over time, the "heat and light" seems to be focused less on successful achievement of the DPs in the plan and more on the end state. Without continued focus on the remaining DPs of the GGW (with a long needed review and update), the end state will likely never be realized. The doctrine "espouses a command-driven philosophy" which is equally the case for the GGW, especially in providing the right amount of "heat and light" on Bell Helicopter and DTAES. This is difficult; however, given most of the stakeholders (WSM, DTAES and Bell Helicopter) do not work for 1 Wing nor the DComd 1 Cdn Air Div. This factor is potential a cause of why the GGW did not achieve its end state, but still does not prove that the OPP is ill-suited to this type of military event.

Syndicate 2 Discussions

[21] Canada. Department of National Defence, *B-GJ-005-500/FP-000, Canadian Forces Joint Publication 5.0 (CFJP 5.0), The Canadian Forces Operational Planning Process (OPP), (*Ottawa: DND Canada, April 2008), 1-1.

It is interesting to look back on our discussions about OD and CF OPP in general and determine if the advantages and disadvantages discussed apply to the GGW as they would to any operation. The following paragraphs outline the discussion summaries.

Revision to Doctrine

During our discussion on if there is a need for revision to OPP doctrine, Maj Shea summarized the following:

> I believe that this may be caused by the use of the word 'campaign.' How do we define 'campaign'? Is it campaign design for the entire mission, e.g. OP IMPACT, or is campaign design for an operation that is conducted within the overall mission, e.g. OP MEDUSSA? Arguably, it is both.[22]

LCol Rodgers commented equally that a three year plan for an operational design is much too long as so many things change during that timeframe that impact the plan. He agreed that having a plan for review and changes to the plan would have helped to ensure it was successful to a greater extent.[23] Additionally, CFJP 5.0 is written specifically for planning a traditional operation. As a result, LCol Rodgers could only take the concepts and apply them as he saw fit for the GGW programme. Our comments are equally if not more so applicable to the GGW.

Time Consuming and Not Responsive

Our next discussion focused on whether or not OD is too time consuming and not adequately responsive. The summary of the discussion by Maj Shea was that this question: "…… is best summed up with the pithy response of "only if we let it."

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[22] Shea, February 26, 2015 (1:54 PM), *Summary of Syndicate 2 comments, "Question #1 Revision of Doctrine?,"* DES/TD-3 Operational Design: Pros or Cons and Alternatives, February 21, 2015, http://bib.cfc.forces.gc.ca/CFCLearn/mod/forum/discuss.php?d=6496

[23] LCol Marc Rodgers, Interview, 15 May 2015.

Throughout the discussions, it is evident that most/all are in agreement that the time devoted to the OPP, including the OD, is "as much time as you have."[24] For the GGW OD, there was greater time available to conduct the planning and the OD, so this was less of an issue for the GGW than for traditional operations.

Design Theory Usefulness

Our third discussion focussed on the usefulness of Design Theory and Maj Shea summarized the following:

> As recognized throughout the discussions, the operational planning processes (OPP; MDMP; SOD), which encompass OD, are intended to be a guide, not a prescription; i.e. they are meant to be iterative, scalable and adaptable. In this manner, an OD can be developed that is flexible and it is the best design within the limits of time constraints.[25]

The fact that OPP is a guide is the key to applying OD and OPP outside the area for which it was originally intended, that of such military issues as the GGW program. As described earlier in this paper, LCol Rodgers followed the concepts of OPP and OD; however, the CFJP 5.0 is very specific about how the steps are applied specifically in the context of a military operation. There is no guidance on how to apply the steps outside such an operation. If our conclusions are in fact correct, and the fact that it has been applied as a planning tool provides confirmation of this, there is merit for using it for the GGW. Most importantly are the facts that every senior officer is taught CF OPP throughout their career and an OD is easily recognizable by all. To paraphrase LCol

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[24] Shea, February 26, 2015 (6:43 PM), *Summary of Syndicate 2 comments, "Question #2 OD as being too time consuming and not adequately responsive?*," DES/TD-3 Operational Design: Pros or Cons and Alternatives, February 21, 2015, http://bib.cfc.forces.gc.ca/CFCLearn/mod/forum/discuss.php?d=6497

[25] Shea, February 27, 2015 (5:03 AM), *Summary of Syndicate 2 comments, "Question #3 How useful is design theory for operational-level planning?*," DES/TD-3 Operational Design: Pros or Cons and Alternatives, February 21, 2015, http://bib.cfc.forces.gc.ca/CFCLearn/mod/forum/discuss.php?d=6498

Rodgers' assessment on its usefulness within the GGW program, he stated the biggest advantage was that the senior operators "got it"; an important achievement that he feels couldn't be done with any other planning process.[26] It is these senior operators in the air force that put "heat and light" on the program and they could only do so once they understood how the end state would be achieved.

In the same discussion was a sideline discussion regarding OD in a complex operating environment.[27] LCol Rodgers discussed at length the complexity involved in each of the DPs. The Griffon serviceability issue was certainly a complex issue with many moving parts.[28]

Pros of OD

Our last discussion concerned the pros and cons of OD. We concluded the following pros:

> Operational design complements the planning process in such a way that planning is not complete without design. It is important that operational design be reinforced through education and training and, in so doing, provides military planners a consistent and doctrinal manner by which to develop the operational design.
>
> Operational design highlights commanders and staffs at all levels that not all problems are created equal, and that an immediate, obvious solution to a problem may not be the right solution.
>
> Within a joint and multinational context, a collective understanding of operational design should stimulate greater collaboration between higher,

[26] LCol Marc Rodgers, Interview, 15 May 2015.

[27] Shea, February 27, 2015 (5:03 AM), *Summary of Syndicate 2 comments, "Question #3 How useful is design theory for operational-level planning?"* DES/TD-3 Operational Design: Pros or Cons and Alternatives, February 21, 2015, http://bib.cfc.forces.gc.ca/CFCLearn/mod/forum/discuss.php?d=6498

[28] LCol Marc Rodgers, Interview, 15 May 2015.

> lower, and adjacent organizations to ensure a common understanding of the environment, the problem, and the approach to solve the problem.[29]

Certainly, all these pros apply equally for conducting an OD for the GGW. The plan, the GGW OD, was the key document that provided information to the senior officers that could provide the "heat and light" as and when required to ensure success. The GGW plan was not complete without the OD. Additionally, the OD provided enough information to demonstrate that there were significantly more than just a few initiatives that would provide a solution to Griffon serviceability and that a lot of activities that each consumed significant resources were required. Lastly, it articulated many problems that were well known in the technical community to the operational community, creating a greater understanding by all.

Cons of OD

Our last discussion concerned pros and cons of OD. We concluded the following cons:

> The complexities of the current operating environment (COE) render the CEOD approach as an ineffective operational design methodology.
>
> Because Canadian operational design takes place within the planning process, critical theoretical assumptions that underpin the formal planning process (e.g. linear formalized process, predetermination, and synthesis through analysis) influence its form and practice ….. This linear process was highly applicable at the time it was initially developed (i.e. during the time of imperialism which involved large-scale, state on state, mechanized warfare); however, this process if of limited utility in today's COE.
>
> Canadian doctrine defines operational design as both a process and a product. Operational design as a product is a straightforward concept and one that is relatively easy to grasp; however, as a process, it is more ambiguous. Furthermore, operational design and operational planning are

[29] Shea, February 22, 2015 (7:15 PM), *Summary of Syndicate 2 comments, "Operational Design – Pros, Cons and Alternatives," DES/TD-3 Operational Design: Pros or Cons and Alternatives*, February 21, 2015,http://bib.cfc.forces.gc.ca/CFCLearn/mod/forum/discuss.php?d=6495

> symbiotic in nature and operational design is a byproduct of the OPP process. Consequently, as a process, the CAF operational design methodology is difficult to differentiate or separate from planning. The current Canadian approach to operational design is linear, reductionist and deterministic.[30]

The complexity of the GGW was similar to that found in operations. So equally, this con of OD in complex operations applies to the GGW. Similarly, a plan that is linear may not be the best solution for an operation nor the GGW. Finally, OD for the GGW did not demonstrate the significant amount of work, the moving parts and the competing priorities involved in each of the DPs. Certainly, other shortfalls of OPP and OD apply equally to the GGW, such as the difficulty linking tactical actions with strategic objectives.

Overall, the OPP seemed to be a good solution for the GGW; the process, with some adaptation was easily followed to produce a plan that was, of most importance, easily understood by all. The reason it didn't succeed was that it suffered many of the pitfalls that a traditional operation's OD would suffer. Most significantly, was a lack of follow through in communicating the completion of DPs and the need for review and update of the plan over its three year time period. Currently, as the GGW program approaches to its projected end state, there doesn't seem to be a push to see it through to the end. I think throughout this paper, that the GGW as an OD was a worthwhile plan and should be seen through to its end state. It will have to be updated, however. Currently, 1 Wing has an Availability, Reliability, and Maintainability Team dedicated to collecting data and making deductions and conclusions from this data. This would act

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[30] Shea, February 22, 2015 (7:15 PM), *Summary of Syndicate 2 comments, "Operational Design – Pros, Cons and Alternatives*," DES/TD-3 Operational Design: Pros or Cons and Alternatives, February 21, 2015,http://bib.cfc.forces.gc.ca/CFCLearn/mod/forum/discuss.php?d=6495.

perfectly as a factors analysis to bring the GGW OD up to date with new DPs and better defined MOEs.

CONCLUSION

An OD can be a valuable tool for such things outside traditional war-fighting operations as was demonstrated by the GGW OD. This conclusion is due to the fact the complex program such as the GGW program was created with the CF OPP. LCol Rodgers was able to follow the OPP quite easily and adapt its concepts. More so, the GGW OD provided a perfect communication tool with which all senior officers were familiar, and provided sufficient detail up the chain of command so that heat and light could be focused where needed. The GGW did not achieve its end state; however, I believe it would have done so if DPs had been completed on time and a review of the plan had been conducted. As a result, the CF OPP is well suited to those military events outside traditional war fighting operations as stated in the CFJP 5.0.

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