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## THE LEGALIZATION OF CANNABIS: A WICKED PROBLEM FOR THE CAF

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*Exercise Solo Flight*

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## THE LEGALIZATION OF CANNABIS: A WICKED PROBLEM FOR THE CAF

### Introduction

During the 2015 federal election, one of Prime Minister Justin Trudeau's campaign promises was to legalise marijuana<sup>1</sup> (also known as a cannabis<sup>2</sup>). He won that election and since coming into power, has worked to keep this promise. Despite much controversy and rumours of delays by the Senate, Bill C-45 is set to come into effect 1 July 2018.<sup>3</sup>

Canada is not the first country to enact such legislation. The Netherlands has permitted the use of the substance since 1976.<sup>4</sup> While the United States has federal laws prohibiting cultivation, distribution, and possession of cannabis<sup>5</sup>, some states, such as Colorado and Oregon do permit it.<sup>6</sup>

Many communities, employers, professional bodies, governments, and law enforcement agencies within Canada have expressed concerns about the impacts of the legalization of cannabis.<sup>7</sup> Some supporters of the legalization of cannabis claim that cannabis should be treated

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<sup>1</sup> Liberal Party of Canada, "myPlatform Marijuana," last accessed 26 May 2018, <https://www.liberal.ca/realchange/marijuana/>.

<sup>2</sup> While Trudeau campaigned using the term "marijuana", the more technical term for the drug, and the term used in federal legislation, is "cannabis". As such, it will be referred to as cannabis throughout this paper. (<http://www.cbc.ca/news/canada/new-brunswick/weed-pot-cannabis-marijuana-whats-the-difference-1.4405440>).

<sup>3</sup> Tasker, J, "Trudeau Vows Cannabis will be Legal by Summer as Senators Urge Delay", *CBC News*, 3 May 18, <http://www.cbc.ca/news/politics/cannabis-trudeau-legal-summer-1.4647026>.

<sup>4</sup> Centre for Public Impact, "The Dutch Policy on Marijuana Use – Continuity and Change", last accessed 28 May 18, <https://www.centreforpublicimpact.org/case-study/dutch-policy-marijuana-use-continuity-change/>.

<sup>5</sup> United States Department of Justice, "Justice Department Issues Memo on Marijuana Enforcement", last accessed 26 May 18, <https://www.justice.gov/opa/pr/justice-department-issues-memo-marijuana-enforcement>.

<sup>6</sup> Aydelotte, J. *et al*, "Crash Fatality Rates After Recreational Marijuana Legalization in Washington and Colorado," *AJPH Research* 107, no.8 (August 2017), 1329. <http://ebscohost.com>.

<sup>7</sup> Tasker, *Trudeau Vows Cannabis will be Legal...*; Cullen, C., "How Much Marijuana is Too Much? Legalization Means New Questions for Police", *CBC News*, last modified 30 April 2018, <http://www.cbc.ca/news/politics/how-much-marijuana-is-too-much-legalization-means-new-questions-for-police-1.4632962>

no differently than alcohol. Some may claim that cannabis is even less harmful than alcohol.

The Canadian Armed Forces (CAF) is no exception as an organization with many concerns and challenges related to the legalization of cannabis.

This paper will argue that the legalization of cannabis is a wicked problem for the CAF; that it is not as simple as adding cannabis to every policy regarding alcohol, and removing the drug from the list of prohibited substances. This paper will, first, define what is a wicked problem. It will then review and describe the current policies regarding drug and alcohol use in the CAF, followed by examples of areas of the CAF that will be affected by the legalization of cannabis. The paper will conclude with how the legalization of cannabis fits the definition of a wicked problem for the CAF.

### **Definition of a Wicked Problem**

According to Andrejs Skaburskis, the term “wicked problem” is credited to Horst Rittel and Melvin Webber, who collaborated on their now-famous article “Dilemmas in a General Theory of Planning”<sup>8</sup> Morrison differentiates wicked problems from complex and tame problems. Specifically, s/he contends that stakeholders agree to both the nature of, and solution to, a tame problem. In a complex problem, the stakeholders may agree to the nature of the problem, but they disagree on the best solution to it. In the case of a wicked problem, stakeholders disagree on both the nature of and best solution to the problem.<sup>9</sup> This differentiation of the types of problems is summarized in the following table:

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<sup>8</sup> Skaburskis, A., "The Origin of 'Wicked Problems'", *Planning Theory & Practice* 9, no. 2 (June 2008), 277.; Horst, R., and Webber, M., "Dilemmas in a General Theory of Planning", *Policy Sciences* 4, no. 2 (June 1973), 155-169.

<sup>9</sup> Morrison, V., "Wicked Problems and Public Policy", *National Collaborating Centre for Healthy Public Policy* (June 2013), 1.

**Table 1 – Views held by stakeholders on tame, complex and wicked problems**

	Tame	Complex	Wicked
Nature of problem	Agree	Agree	Disagree
Best Solution	Agree	Disagree	Disagree

Source: Roberts, N. "Coping with Wicked Problems" (2000).<sup>10</sup>

In contrast to a tame problem, a wicked problem cannot be solved by scientific or evidence-based methods, whereby a scientist or engineer defines the problem, gathers data, analyzes the data, proposes and, finally, implements a solution. In fact, the opposite is true; the solution must be proposed first and worked backwards in order to define the problem.<sup>11</sup> This distinction is one of the ten distinguishing properties Rittel and Webber used to define wicked problems. All ten properties are listed in Table 2 below.

**Table 2 - Ten distinguishing properties of wicked problems**

1. There is no definitive formulation of a wicked problem.
2. There is no stopping rule
3. Solutions to wicked problems are not true-or-false, but good-or-bad
4. There is no immediate and no ultimate test of a solution to a wicked problem
5. Every solution to a wicked problem is a "one-shot operation"; because there is no opportunity to learn by trial-and-error, every attempt counts significantly
6. Wicked problems do not have an enumerable set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan
7. Every wicked problem is essentially unique
8. Every wicked problem can be considered to be a symptom of another problem
9. The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolution
10. The planner has no right to be wrong

Source: Rittel, Horst W.J., and Melvin M. Webber, "Dilemmas in a General Theory of Planning", *Policy Sciences* 4, no. 2 (June 1973), 161-167.

<sup>10</sup> Quoted in Morrison, V. *Wicked Problems and Public Policy...*, 1.

<sup>11</sup> Horst, R., and Webber, M., "Dilemmas in a General Theory of Planning"..., 160.

Grint identifies distinct forms of authority or power best suited to resolve different types of problems. He claims that rational/ management and commanding/authoritative power are most appropriate to resolve tame and critical (natural disaster/ crisis) problems respectively. Conversely, wicked problems “require leadership where the role of leaders is to ask questions and collaborate with others on finding the best way to approach the problem”.<sup>12</sup> In its publication on wicked problems, the Australian government emphasizes the importance of a whole of government approach to tackling wicked problems. In addition they argue the benefits of crossing organizational boundaries (i.e. working with organizations/ stakeholders outside of the government). They recommend identifying all stakeholders involved in the issue (“inter-organizational mapping”) as an important first step to tackling a wicked problem.<sup>13</sup>

### **Current Policies Regarding Cannabis/ Drug and Alcohol use in the CAF**

In addition to the (current) federal laws prohibiting cannabis use, possession, and trafficking, the CAF has numerous internal policies and orders prohibiting its use and governing personnel administration when CAF members contravene these laws and policies. Queens Regulations and Orders (QR&O) Chapter 20, augmented by Defence Administrative Orders and Directives (DAOD) 5019-3, governs the CAF drug control program. These orders provide authority and direction for drug testing for specific purposes and in defined circumstances, including: testing for cause; controlled testing; deterrent testing; and high risk safety sensitive testing.<sup>14</sup> By virtue of cannabis being listed in Schedule II of the Controlled Drugs and

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<sup>13</sup> Government of Australia, *Tackling wicked problems: A public policy perspective*, (Australian Public Service Commission. 2007), 17, 20-21. Retrieved from <http://www.enablingchange.com.au/wickedproblems.pdf>

<sup>14</sup> Department of National Defence, *QR&O Chapter 20*, Ottawa: DND Canada.  
[http://www.forces.gc.ca/assets/FORCES\\_Internet/docs/en/about-policies-standards-queens-regulations-orders-vol-](http://www.forces.gc.ca/assets/FORCES_Internet/docs/en/about-policies-standards-queens-regulations-orders-vol-)

Substances Act, these orders include cannabis in their definition of “drug”, and thereby apply to cannabis use.<sup>15</sup>

Alcohol, on the other hand, is not listed in Schedules I to V of the Controlled Drugs and Substances Act. As such, QR&O Chapter 20 and DAOD 5019-3 do not apply to alcohol consumption. However, DAOD 5019-7 governs alcohol misconduct, including conduct deficiency involving alcohol. Within the Directorate of Military Careers Administration (DMCA), there is a section (DMCA 3) devoted to oversight of these policies and conducting administrative reviews (ARs) of members who have engaged in alcohol, drug, sexual, and other forms of misconduct. Each case is reviewed based on the individual circumstances and relevant policy.<sup>16</sup>

### **Areas of the CAF Affected by Legalization of Cannabis**

There are several areas within the CAF that will be impacted by the legalization of cannabis. These include, but are not limited to: safety and enforcement, recruiting and retention, and social considerations. The following paragraphs will describe how the legalization of cannabis could potentially impact the aforementioned areas.

Cannabis contains hundreds of chemical substances. A number of these substances are known as cannabinoids, which have effects on cell receptors in the brain and body. Delta-9-tetrahydrocannabinol (THC) is responsible for the way the brain and body react to cannabis,

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01/ch-20.pdf; Department of National Defence, *DAOD 5019-3*. Ottawa: DND Canada. <http://www.forces.gc.ca/en/about-policies-standards-defence-admin-orders-directives-5000/5019-3.page>

<sup>15</sup> Department of National Defence, *QR&O Chapter 20*...; Justice Laws Website, *SCHEDULE II*. Last accessed 26 May 18. <http://laws-lois.justice.gc.ca/eng/acts/C-38.8/page-16.html#h-32>.

<sup>16</sup> Department of National Defence, *DAOD 5019-3*...; Department of National Defence, *DAOD 5019-7*, Ottawa: DND Canada. Last accessed 26 May 18. <http://intranet.mil.ca/en/defence-admin-orders-directives/5000/5019-7.page>.

including the high and intoxication.<sup>17</sup> Cannabis can negatively impact judgment, motor skills, reaction time, decision-making skills, and balance and coordination.<sup>18</sup> Most tasks required of CAF members require high functioning in these areas and allow for very little margin of error without grave consequences. As such, there are many obvious significant potential safety implications should CAF members be intoxicated while on duty.

Given the safety considerations of CAF duties, policies have been developed limiting alcohol consumption prior to going on duty. Specifically, Canadian Air Division Order 1-270 requires personnel in specific occupations to abstain from consuming alcohol at least 12 hours prior to flying or control duties, while occupations in support of flight operations require eight hours of sobriety prior to reporting for duty.<sup>19</sup> Similarly, Chapter 2 of Ships Standing Orders prohibits alcohol consumption within six hours of proceeding on watch onboard ships.<sup>20</sup> Most operational deployments and taskings either prohibit, or significantly limit, alcohol consumption, with few exceptions.

The potency of alcoholic beverages is measured by percent alcohol by volume (ABV), and levels of impairment by alcohol are measured by blood alcohol content (BAC).<sup>21</sup> As such, people know approximately how much of a given alcohol they can safely consume before becoming intoxicated. Furthermore, objective limitations, such as those imposed by the Royal Canadian Air Force and Royal Canadian Navy, described above, may be determined.

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<sup>17</sup> Government of Canada, “About Cannabis,” last modified 6 March 2018. <https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/about.html>.

<sup>18</sup> Government of Canada, “Risks While Driving Impaired by a Drug,” last modified 19 February 2018. <https://www.canada.ca/en/health-canada/services/substance-abuse/talking-about-drugs/driving-impaired-drug.html>.

<sup>19</sup> Department of National Defence, *Canadian Air Division Order 1-270*, (Ottawa, DND Canada) last modified 21 June 2014. <http://esquimalt.mil.ca/fhsu/client%20links.htm>.

<sup>20</sup> Department of National Defence, *Ships Standing Orders Chapter 2*, (Ottawa, DND Canada), last accessed 26 May 18. <http://esquimalt.mil.ca/cfp/Administration/Files/SSO%20AL9%20MC4%20-%202002%20Sep%2015.pdf>.

<sup>21</sup> House of Commons, Standing Committee on Justice and Human Rights, *Minutes of Proceedings and Evidence*, Wednesday, 3 February 1999. <https://www.ourcommons.ca/DocumentViewer/en/36-1/JURI/meeting-109/evidence>.

THC potency is not as precise a science as is alcohol potency. As cannabis has been illegal, it has not been as widely studied by scientific and medical communities as other drugs. THC potency varies depending on the form of cannabis, ranging from *up to* 3% in cannabis oil to *up to* 90% in chemically concentrated extracts such as hash oil.<sup>22</sup> The existence of a drug impairment may be determined by a drug recognition expert (usually a police officer) using the Standardized Field Sobriety Test. However, the precise level of impairment is not readily apparent without a toxicological sample of urine and oral fluid or blood.<sup>23</sup> The same time limits between alcohol consumption and being on duty cannot be directly applied to cannabis use. Given the varying THC potency levels between forms of cannabis, should the CAF permit recreational cannabis use by its members, safety time limitations will need to be well-researched and explicit.

Roadside screening devices exist to measure BAC and are frequently and widely used by police officers.<sup>24</sup> A similar roadside screening device, the Oral Fluid Drug Screening Device, has been piloted to measure drug impairment but is not yet in wide use. While neither device would necessarily be regularly employed to measure intoxication of CAF members prior to duty (other than by Military Police for road safety), there is the possibility of adopting and employing such a device when it is available and when certification and training on such equipment is completed.

The CAF has experienced difficulties in recruiting and retaining personnel in sufficient numbers to off-set the surge of attrition in recent years. The CAF currently has thousands of vacant positions across the forces. While data indicates that there were approximately 450 more military personnel in March 2017 compared to the previous year, the current government plans

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<sup>22</sup> Government of Canada, “About Cannabis” ...

<sup>23</sup> Royal Canadian Mounted Police, “Drug Recognition Expert Evaluations”, last modified 23 June 2014. <http://www.rcmp-grc.gc.ca/ts-sr/dree-eert-eng.htm>.

<sup>24</sup> Royal Canadian Mounted Police, “Alcohol and Drug Impaired Driving”, last modified 23 June 2014. <http://www.rcmp-grc.gc.ca/ts-sr/aldr-id-cfa-aldr-eng.htm>.

to increase the regular force by 2500 and reserve forces by 1500 over the next 20 years.<sup>25</sup>

Meanwhile, demographics show that there could potentially be fewer people entering the work force than leaving it, making the recruitment of smart, capable, and dedicated personnel even more challenging for the CAF.

Statistics show that 28.4% of 18 to 24 year-olds (the target age of new recruits) used cannabis in the previous year in surveys conducted between 2004 to 2015.<sup>26</sup> It is possible that these statistics could increase with the legalization of cannabis. The CAF cannot afford to deter potential applicants by imposing policies that will prohibit the recreational use of cannabis when it will be legal for their civilian counterparts to use.

Other considerations for the CAF in the wake of legalization of cannabis include when and where will cannabis use be permitted. If recreational cannabis use by CAF members is permitted, will it be permitted in general smoking areas for off-duty members who live on base? Will forms other than smoke, such a vapor and edibles, be permitted and will it be sold in conjunction with cigarettes in Canex stores on base or will it be available at the bars in messes? Will possession and use be permitted in residential housing units (RHUs) on Department of National Defence (DND) land? Will members be permitted to grow plants for personal use in their RHUs? If cannabis use by CAF members is not permitted, will their family members be permitted to use it in their homes (RHUs) on DND land? How will the CAF monitor and enforce prohibition of cannabis use by its members when it becomes legal for the rest of society?

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<sup>25</sup> Berthiaume, L., “Military Short Thousands of Personnel Despite Small Increase in Ranks”, *CBC News*, last modified 4 January 2018. <http://www.cbc.ca/news/politics/military-personnel-numbers-1.4473134>; Berthiaume, L., “Canadian Armed Forces Aims to Fix its Recruitment System to Foster Diversity”, *The Star*, last modified 25 June 17. <https://www.thestar.com/news/canada/2017/06/25/canadian-forces-aims-to-fix-its-recruitment-system-to-foster-diversity.html>

<sup>26</sup> Statistics Canada, “Canadian Demographics at a Glance, Second Edition”, Ottawa, 19 February 2016. Retrieved from <http://www.statcan.gc.ca/pub/91-003-x/91-003-x2014001-eng.pdf?contentType=application%2Fpdf>.

## **Legalization of the Cannabis and the Definition of a Wicked Problem for the CAF**

The following paragraphs will outline how the issue of the legalization of cannabis for the CAF relates to the attributes of a wicked problem:

There is no definitive formulation of a wicked problem – the potential solutions to the problem of legalization of cannabis for the CAF could include permitting its use by CAF members, prohibiting its use by CAF members, restricting its use by CAF members, or ignoring the issue and not addressing it all. However, is the issue one of safety, one of recruiting, or of other social implications such as housing and family? To solve any one these issues, could negatively impact any of the other issues.

There is no stopping rule - Any of the potential high-level so-called solutions (permit, prohibit, or restrict), would require further study and policy development, each one raising further questions, problems, and issues to also be further studied and addressed via policy development.

Solutions to wicked problems are not true-or-false, but good-or-bad – in determining how to address the issue of legalization of cannabis within the CAF, the potential solutions would need to be weighed against CAF values, and relative impacts on the institution. The CAF could value members' safety over all other considerations and prohibit cannabis use. However, if recruiting is affected by such a decision and there are insufficient members to deploy or fill other crucial roles, members' (and potentially society's) safety could also be at risk.

There is no immediate and no ultimate test of a solution to a wicked problem – while statistics on cannabis use, safety issues, and demographics are all readily available, they are only *indicators* of what *may* result from the legalization (or not) of cannabis. Only time will tell if the right decisions are made or if policies are sufficiently explicit and robust to ensure that the CAF

is able to continue operating in an environment where recreational cannabis use is legal, at least for civilians.

Every solution to a wicked problem is a “one-shot operation”; because there is no opportunity to learn by trial-and-error, every attempt counts significantly – loss of life, limb, or even productivity, as a result of the wrong decisions pertaining to cannabis use, will not be acceptable. Similarly, not meeting recruiting targets even one year as a result of faulty policy regarding cannabis use will have long-lasting implications in years to come, which will not be easily corrected.

Wicked problems do not have an enumerable set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan – while four high-level potential solutions to the legalization of cannabis use issue for the CAF (permit, prohibit, restrict, or ignore) may appear exhaustive, they do not sufficiently address further issues or problems inherent in those solutions.

Every wicked problem is essentially unique – the issue most closely relatable to the legalization of cannabis is alcohol. However, while similar, the issues are not the same and the solution-sets and policies pertaining to alcohol cannot be directly applied to the legalization of cannabis. Even the policies related to alcohol misconduct are somewhat general, and therefore encourage leadership to contact DMCA to discuss the details of individual cases.<sup>27</sup> As such, one could argue that alcohol is a unique wicked problem for the CAF in and of itself.

Every wicked problem can be considered to be a symptom of another problem – the legalization of cannabis stems from a campaign promise on the part of Prime Minister Trudeau. He contends that the current system of cannabis prohibition does not work. Specifically, young

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<sup>27</sup> Department of National Defence, *DAOD 5019-7...*

people still have access to cannabis, and too many people end up with criminal records as a result of small amounts of the drug. Making arrests and prosecuting minor drug offences cost the criminal justice systems too much money. He claims that legalizing, regulating, and restricting access to cannabis will ensure that children do not have access to it and criminals will not profit from cannabis sales.<sup>28</sup> Given that DND has the largest budget in the federal government,<sup>29</sup> perhaps it will benefit from the tax revenues garnered from the legalization of cannabis. While the legalization of cannabis presents numerous challenges to the CAF, the issue could be a symptom of an economic problem for Canada, and therefore DND.

The existence of a discrepancy representing a wicked problem can be explained in numerous ways – personnel shortages in the CAF can be an example of a discrepancy representing a wicked problem being explained in numerous ways. Recruiting numbers can be down due to lack of diversity in the CAF and minorities not seeing themselves represented in the ranks, the CAF is too strict and does not permit cannabis use thereby deterring potential enrollees, millennials aren't interested in serving their country, or manning levels and/or recruiting targets are higher than the actual need for personnel, thereby creating a false impression of personnel shortages.

The planner has no right to be wrong – the legalization of cannabis could become a case study for future policy-makers, where the policies and decisions taken within the CAF could be analyzed for what went well and what could have been improved. However, as lessons learned through aspects of the issues and solutions could apply to future problems, the solutions to issues relating to the legalization of cannabis will not be able to be replicated precisely on future problems for the CAF.

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<sup>28</sup> Liberal Party of Canada, myPlatform...

<sup>29</sup> Hansen, K., "What's Happening to Canada's Defence Spending?", *MacLean's*, 6 March 2018. <https://www.macleans.ca/opinion/whats-happening-to-canadas-defence-spending/>.

## **Conclusion**

This paper has examined safety, recruiting, and housing and social implications as areas of the CAF that could potentially be affected and deserve consideration when recreational use of cannabis becomes legal in July 2018. It is clear that there is no one right answer to the greater issue of legalization of cannabis for the CAF. While similar, policies relating to alcohol consumption cannot be applied directly to the issue of legalization of cannabis for the CAF. Each of these issues is unique and, therefore both represent wicked problems for the CAF. This paper has intentionally avoided making recommendations on specific problem definition and solutions to address the legalization of cannabis as a wicked problem for the CAF. The issues will be best resolved through much collaboration as part of a whole of government approach, and consultations with agencies outside of the government. Lastly, it will require strong leadership, without artificially imposed constraints, to ask the right questions and champion the necessary collaboration and consultation.

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