



## **RE: Notice of Amendments to Standard 722.16 – Aerial Work**

Following the December 2022 changes to the Canadian Aviation Regulations (CARs) regarding flight time limitations as described in sections 702 (Aerial Work) and 703 (Air Taxi), it is encouraging to see that progress continues to be made regarding safety practices and mitigating unintended consequences, in this case in the area of forest firefighting.

As the voice of the mineral exploration and development industry, the Prospectors and Developers Association of Canada (PDAC) anticipates that similar changes can continue to be made to mitigate risks to other industries posed by the modifications to the CARs. A wide array of stakeholders have indicated to PDAC and other organizations that the original changes lack clarity, thereby increasing regulatory burden for operators, and pose new safety risks, specifically by reducing emergency response capacity. There are various means to mitigate the potential impacts described below. In particular, we highlight two recommendations for consideration:

- 1) **Expand the definition of aerial work to ensure all essential activities involved in mineral exploration can be conducted under section 702** – The CARs define aerial work as “a commercial air service other than an air transport service or a flight training service,” while the application of aerial work regulations is generally limited to helicopters carrying or dispersing some load. Particularly in the mineral industry, significant amounts of essential aerial work, like surveying and reconnaissance, are carried out without an attached load. Under the amended regulations, these activities and may be considered as air taxi operations regardless of the specialized training received by geologists and other skilled professionals and technicians undertaking this type work. Expanding the definition of aerial work would better reflect the scope of essential work carried out from helicopters.
- 2) **Implement a voluntary compliance period for regulatory changes until capacity to review operators’ performance-based notices of intent is established** – With the announced changes to the CARs, it was noted by Transport Canada that operators would be able to submit notices of intent to operate under modified flight time guidelines, which would be reviewed by inspectors in a timely manner and approved if deemed safe. For the mineral industry, this represented an opportunity to continue operating the fly-in, fly-out model that has proven to be safe and effective. However, the process to submit such a notice remains unclear and stakeholders indicate that reviews have not yet begun due to inspectors’ availability. Until it is possible to review notices of intent, maintaining the recent regulatory changes without providing a voluntary compliance period for remote communities, mineral exploration camps or similar businesses and may result in a slowdown of mineral exploration activity in Canada and pose a safety hazard

### **Background**

Mineral exploration is the backbone of Canada’s robust mining industry and this segment of industry in Canada represent approximately 1/5 of all global exploration spending, or approximately \$4B in 2022. The safe, uninterrupted continuation of exploration activities is essential to generate the new discoveries needed to drive mining activity in Canada and is the key component of Canada’s critical mineral strategy and ability to reach net zero carbon emissions by 2050. However, industry stakeholders are concerned that the changes to sections 702 and 703 may significantly limit the industry’s capacity to conduct mineral exploration in Canada in a safe manner. While the changes may impede technical work, it is of particular concern that the



flight time limitations of section 703 may limit operators' ability to respond to emergencies and provide a safe workplace for employees, particularly when operating in remote areas and settings where things like transportation is absent or severely lacking.

Many of the geological deposits of interest to the mining industry are located in remote areas subject to highly variable meteorological and physical conditions. This imposes inherent limits on exploration activities as sites are often in the bush, accessible by helicopter or float plane only, and subject to fluctuations in working hours based on seasonal factors like ice cover and daylight hours. Due to the remote and seasonal nature of the work, many exploration operations must operate a fly-in, fly-out crew rotation model that allows for long rest periods off-site, as well as longer periods of safe work while aircraft are based at the worksite or camp supporting the field activities.

Fly-in, fly-out work also demands greater awareness of the dangers of fatigue: fatigue management is a safety priority for explorers, particularly as the severity of potential incidents is magnified by the remote nature of operations. While the exploration industry welcomes regulatory frameworks to further improve fatigue management, we are concerned that the December 2022 changes to the CARs were developed with a focus on year-round pilots and tourism operations, leaving the successful, established fly-in, fly-out model employed by explorers at risk.

This concern arises from the new definitions of flight time for 703 (Air Taxi) operations. Many exploration activities are reliant on the presence of a geologist or other skilled person who is not physically involved in the aerial work activity. For example, the installation of a drill generally requires a drill crew be assisted by a geologist or technician to confirm location and positioning. Installation and drilling, which involves a number of flights without a load on the helicopter, have previously been considered Aerial Work activities subject to 702, as it involves persons who "perform an essential function in connection with the aerial work operation and is necessary to accomplish the aerial work operation" (per CASS 722).

Following the changes, however, it has been suggested that only drillers can be carried on a 702 flight if the helicopter is not carrying a sling load. Yet, during drilling, the ongoing presence of a geologist is essential to ensuring various technical matters, including correct drill orientation and, essentially, drill safety. This interpretation would mean that all flights facilitating a drilling program, with the exception of installation and removal, would be reclassified under section 703 to accommodate the geologist's participation—despite the fact that these operations only represent a small amount of flight time, often not exceeding one to two hours per day.

This creates two main problems: first, the more stringent flight time limitations for Air Taxi operations would severely impact mineral exploration projects, as many operators would require a second pilot and, in some cases, a second helicopter to maintain both safety standards at the camp and planned operational programs. This would create a significant financial hurdle, and create situations where junior exploration companies will be unable to conduct work due to shortfalls in available pilots, aircraft or funds and it would create an uneven playing field for larger companies that typically have greater access to resources. The other main issue is the undue burden placed on the pilot by the lack of clarity in the distinction between Aerial Work and Air Taxi operations. The example presented above is only one of many that can arise in the field, and the duty to identify the flight type in these unclear situations imposes a considerable mental load on the pilot.



## Request for Interpretation

To clarify the distinction between aerial work and air taxi operations, and mitigate the potential impacts of this delineation on exploration operations, we ask that you consider the following scenarios:

- During a drilling program, it is clear in the CARs that the drill crew are considered essential to the “active work” and classified as under section 702. In order to correctly place the drill and ensure proper geological results from the drilling program, a geologist must be present to advise and provide technical expertise; however, they are not physically involved in the work. Does the geologist’s presence on these flights reclassify them under section 703?
- As exploration programs, particularly those run by junior exploration companies, operate on strict budgets, it is essential to extract maximum benefit from all flights. This means that water, environmental or geological reconnaissance, monitoring or surveying functions, among others, may be undertaken in conjunction with a flight to a drill rig. Does the presence of an individual conducting aerial reconnaissance, monitoring or surveying on a flight that is also carrying drill crew reclassify it under section 703?
- Continuing the example of surveyors—wildlife surveying has previously been considered aerial work, and it has been suggested that these operations can continue under section 702. Water and environmental surveying are equally essential to the safety and sustainability of exploration work, and these functions are undertaken by professionals with the same extensive helicopter safety training as wildlife surveyors. Should these surveying activities be considered air taxi operations?
- The modified flight time provisions granted for medical evacuations are an essential safety aspect of the CARs. However, the changes to the regulations risk impeding response to emergencies that are not life-threatening. Operators have already remarked on lower availability of air ambulances as flight time is used up to respond to higher priority incidents. Working in a remote area with knowledge that evacuation to the nearest air base is not possible for what may seem to be “minor” incidents (i.e. a broken leg, concussion, death of a family member) is neither physically nor psychologically safe. In light of a nationwide pilot shortage, how can these emergency situations be managed under the new flight time limits?

The mineral exploration and development industry is seriously concerned about aviation safety, as demonstrated through our continuous efforts in this area. We wish to continue working with Transport Canada to improve safety in the field; however, the changes to sections 702 and 703 as presented do not seem to be addressing an identified safety concern, and their lack of clarity introduces new risks. It is our objective to mitigate these concerns and prevent undue harm to mineral exploration activities, which may be facilitated by an expansion of the definition of aerial work or a pause on regulatory changes until capacity to review operators’ performance-based notices of intent has been established.

We look forward to continuing the discussion on this very important issue with you in the near future and would like to propose a meeting at your convenience. Thank you for your consideration of these comments.