After reviewing the explanatory memorandum and bill it is unclear whether registration and associated costs would apply to the operator of the RPA or model aircraft or the aircraft itself.

In my opinion a mechanism for registration which would apply to the aircraft and not the operator would be completely impossible to implement in a manner which fulfills the intent of the legislation and at the same time is fair and equitable for the operators of these aircraft.

I see two reasons why this is the case:

The first is due to the fact that RPA and model aircraft are fundamentally different to most other forms of aviation. This difference is due to the high degree of modularity reconfigurability of RPA and model aircraft.

Most of the components of an RPA or model aircraft can and are interchanged far more frequently than for other forms of aviation. This includes key airframe members and structural components, along with motors and other propulsion and control components and onboard electronics.

Implementing an aircraft-based registration model would result in a "ship of Theseus" style conundrum where the regulator would have to identify what component constitutes the "essential" or "inalienable" part of the aircraft, and this would be very difficult as RPA's and model aircraft come in a wide range of different configurations.

Secondly the field of RPA technology is evolving quickly and both commercial and recreational operators frequently update their RPA to newer models. Some operators or recreational users also maintain a fleet of many RPA's allowing flexibility to choose a specific RPA to achieve a task.

It seems unfair that one operator should pay more than another operator, simply because they update their aircraft more frequently or have a more diverse range of aircraft.

This would create a negative incentive for operators to update to newer aircraft types, this would obviously cause economic harm to the industry and it may also result in a less safe environment. This is because the safety features of RPA's have seen continual improvement over the years and an aircraft-based registration might incentivize operators to fly older, less capable aircraft or not replace aircraft or components which receive damage or wear.

I submit that for these reasons the Commonwealth should not consider a licensing or registration model which applies to the aircraft and not the operators themselves.

27th of September, 2020