QUALIFICATIONS FOR AAUS DIRECTORS

1. **A willingness to contribute to furthering the advancement of unmanned systems in Australia.**

   The current aviation revolution of Unmanned Aircraft Systems (UAS) and new and novel modes of aerial transport presents significant opportunity for Australia to establish a sovereign aerospace capability not seen since World War II. In the current global climate, accessibility to aerospace expertise is more important than ever. Our current aerospace industry is largely limited to acquisition of 'Off The Shelf' capability and operations, aside from the more advanced and in-depth undertakings of the Australian Defence Force. The cost to enter the aviation market to build world leading capability has never been lower and there is arguably no industry that presents a better opportunity for wide-reaching STEM education. As an AAUS board member, I intend to use my extensive technical background to enable the advancement of remotely operated and autonomous systems for the greater good of the Australian nation – with a focus on sovereign capability for global export.

2. **Ongoing interest and previous experience in unmanned systems activities.**

   I'm an aerospace engineer with a genuine belief that technology holds the solution to many large societal problems. My experience exists at the nexus of structured, rigorous engineering and innovative, agile approaches. With a wealth of practiced skills in systems engineering, software safety, assurance of autonomous systems, program management, and a passion for advanced and complex technologies, I have a huge desire to continue dedicating my career to remotely operated and autonomous systems.

   My career of 20 years has nearly entirely been in the aerospace domain, with a focus on remotely operated and autonomous systems for the last 10. Having branched out from aerospace into remotely operated mining equipment, autonomous marine vehicles, and other automated systems, I have recently taken up the role of Program Manager for Airservices Australia's Low Level Airspace Program. I intend to continue development of my knowledge in remotely operated and autonomous systems for the rest of my career.

3. **Governance experience, particularly on the Board or Committee of a voluntary organisation or club or of a publicly listed company.**

   Throughout my career I've been involved in development of governance, have been exposed to various different governance models, and provided input to various different governance models in novel environments.

4. **A basic understanding of the roles and duties of Directors of Incorporated Associations (this will be augmented by an AAUS induction process and documentation).**

   I understand that my obligations as a Director of an Incorporated Association would include:
   - *Acting with reasonable care, skill, and diligence;*
   - *Acting in good faith and in the interest of AAUS and for a proper purpose;*
   - *Only use information gained through the role, or the role itself, for a proper purpose; and*
   - *Disclose and/or manage any conflicts of interest.*

I also expect that any directors will contribute to:

- *Controlling the business and operation of the association;*
- *Ensuring that the association complies with its meeting rules;*
- *Ensuring that the association complies with applicable regulation (such as frequency of AGMs, ensuring auditing of financial records, and more); and*
- *Considering applications for association membership.*

5. **Sufficient time available to:**

    a. **Participate in face-to-face Board meetings where Interstate travel may be required (held Quarterly usually in conjunction with major events such as Avalon Airshow).**

    I will make ample time available to participate in face-to-face meetings where necessary, noting that a key result of COVID-19 has been very effective use of web-conferencing facilities instead of face-to-face.

    b. **Respond to issues circulated between meetings**

    I will afford the association time to contribute to issues circulated between meetings. I have no expectation that monthly board meetings will be the only interactions held and welcome the opportunity to progressively contribute and resolve issues.

    c. **Attend and represent AAUS at one or more major events per season (Conferences, seminars, trade shows, etc)**

    As an AAUS member, I have frequently attended at least one major AAUS event per season and often present at that event. I expect to maintain at least this level of contribution to AAUS events.

    d. **Serve on at least one specialised subcommittee (Advocacy, Communications, Events or Membership)**

    I intend to serve on a number of specialised subcommittees, but with a higher priority on Advocacy. With my background and experience to date, I have significant insight into the most effective means of advocating for this industry in the Australian context.

6. **Demonstrable experience in at least one of the following areas vital to the ongoing activities of the AAUS Board:**

    a. **Remotely Piloted Aircraft System Industry**

    I have spent a significant portion of my career and personal interests in the UAS industry. I am RePL qualified, and previously developed Nova Systems' ReOC operational capability from the ground up. I have been involved in a number military UAS projects from a regulatory, safety, and certification perspective (IAI Heron, Northrop Grumman Triton, Autonomous Warrior 2018), developed BVLOS safety case methodologies, developed and coordinated one of the most complex BVLOS trials conducted in Australia (at the time), and now am central to

development of Australia's UTM capability. My experience within the UAS industry has covered:

- *Military and civil UAS;*
- *Development, testing, and operation of UAS;*
- *Safety, certification, and trial design;*
- *Regulatory and policy engagement;*
- *International standards and industry body contributions; and*
- *Research and development of UAS and UTM technologies.*

Additionally, I'm currently a member of the following UAS-related industry working groups:

- *ASTM WK63418 UAS Traffic Management (UTM) Service Supplier (USS) Interoperability Standards;*
- *Global UTM Association, including Aerial Connectivity Joint Activity (ACJA) Work Task 2 (*Interface for data exchange between MNOs and UTM ecosystem) *and 4 (Translating Cellular to Aviation Standards: MASPS and MOPS) and High-Level UTM Principles Paper;*
- *HAPS Alliance; and*
- *AAUS Working Groups (UTM and SORA).*

b. Maritime Autonomous System Industry

During my time at Nova Systems I lead an internal innovation project that developed an autonomous maritime target proof of concept for military exercises. While the project didn't proceed beyond the proof of concept, it did provide me with insight into the maritime industry.

c. Land-based Autonomous System Industry

I was the senior engineer of a team of two Nova Systems engineers providing Systems Engineering support to the BHP Autonomous Dozer Project, seeking to embed systems engineering practices into acquisition of complex systems (previously not done by BHP). In my role I was responsible for developing system requirements, evaluating request for proposal responses, evaluating system automation options, providing recommendations to the Study Manager, and proposing a Forward Work Plan for the Select Phase of the project. I also provided valuable input into a proposal for system safety program, and evaluated OEM software engineering approaches.

d. Government liaison & advocacy

In my role as Low Level Airspace – Program Manager, I have been involved in significant government engagement and advocacy activities on behalf of Airservices in a very challenging environment. I understand the legislative basis of government policy and ongoing policy intent, as well as the key government roles that contribute to regulation and policy development.

e. Media and communications

f. Membership development

g. **Event Management**

h. **Sponsorship and fundraising**

7. **Be an individual member of AAUS or a nominee of a corporate member.**

I am an individual member of AAUS.

Kristian Cruickshank

Digitally signed by Kristian Cruickshank
DN: cn=Kristian Cruickshank, o, ou, email=kristian.cruickshank@gmail.com, c=AU
Date: 2020.10.29 12:26:51 +10'00'

.....

Signature

.....

Name

...../...../.....

Date