1. What are the major UAV technical challenges/opportunities over the next 3 years? What are the major UAV business challenges/opportunities over the next 3 years?

Challenges identified: better payload, battery life and stability, communication between drones and the cloud, and reliable technology where GPS is not an option or is not precise enough.

Opportunities identified: examples from other countries, sensor distribution and collection, and using drones for transit, public health and safety, water monitoring, deliveries, and services (i.e. Wi-Fi).

1. What are the most significant growth areas in UAV application in the next 3 years?

Drones will be an $80 billion industry in the next 10 years and 80% will be in the agriculture sector. Agriculture has been the earliest adopter. There will also be growth in the area of natural resources, and environmental assessments and studies – anywhere there is a lot of area to cover. Photography and videography will continue to use drones.

1. What advice do you have for new start-ups in the UAV space? What advice do you have for companies considering the use of UAVs to solve a business problem?

Advice for new start-ups would include the fact that this is not a get-rich-quick business. You need to identify your niche market and specialize in something. The tool (the drone) is just a commodity; start-ups need to decide what service they will be providing and what the business plan will be. Businesses need to decide if buying a drone is justified and worth the investment: will you use it enough use to warrant having it in-house or is it something you can hire someone to do. You also need to know the regulations for using the drone.

1. What direction/changes do you feel regulation and the law should take on UAVs in Canada?

Don’t stop the party before it gets started. Regulations need to have enough flexibility for the industry to grow; is it open to things we can’t imagine yet? Balance the regulations and the technology: regulations shouldn’t stifle technology development. However, if you deploy a technology, you need to develop a standard of care for using that technology.

1. What is most needed to stimulate the UAV sector in Maritime Canada?

Education is needed: inform businesses and hobbyists. Develop comprehensive FAQs and distribute them widely. Include regulation information and FAQs with drone sales. Create programs and training in schools. Be proactive within education: look at defining problems (before they happen) and then look for solutions within Nova Scotia that can be used globally. Have representation and support at the provincial and Atlantic Canada levels.