Water Airports

November 27, 2019

Transport Canada Transports Canada

Canada

Purpose

To clarify the proposed water airport regulations and to address stakeholder questions

Outline

- Background and justification for Canadian Water Airport Regulations.
- Highlights of the Transport Canada Civil Aviation Notice of Proposed Amendment (NPA) 2019-014.
- Canadian Aviation Regulations Aviation Council (CARAC) summary of comments.
- Questions

Background / Justification

- Currently there is no requirement for water airports to be certified for scheduled passenger service.
- Existing CAR 302 and associated standards are not well suited for water airports.
- Resolution adopted by the 40th General Assembly of International Civil Aviation Organization (ICAO):
  - The Council, within the current allotted budget, as a matter of priority, decide to develop specific Standards and Recommended Practices (SARP) in the appropriate Annexes to the Convention in order to address the design, certification, management, safety and reporting requirements for water aerodromes operations

Background / Justification
(Continued)

It's all about safety:

- Ensure minimum level of safety for scheduled passengers - ticket holders, highest volume of travelling public
- Ensure minimum level of safety for third parties – general public
- Consistent application of safety requirements for same type of activities for all aerodromes - Airports, Heliports and Water Airports
- Potential for Global Navigation Satellite system (GNSS) approaches in the future

Float Plane Scheduled Passenger Destinations

Sites	Total movements per day at each site	Factor Applied to movements per day at each site	Multiplied by 7 for passenger totals per day	Total Passenger movement per year (362 days)	Flight every/min based on 12 hr period
Vancouver Harbour	103	*135	945	342,090	7 /min
Vancouver Sea Island	94	90	658	238,196	8 /min
Nanaimo	74	74	518	187,516	9 /min
Victoria Harbour	54	*86	602	217,924	13 /min
Sechelt	37	37	259	93,758	19 /min
Ganges	28	28	196	70,952	39 /min
Prince Rupert	16	16	112	40,544	45 /min
Maple Bay	14	14	98	35,476	
Whistler	6	6	42	15,204	
Kitkatla	6	6	42	15,204	
Masset	6	6	42	15,204	
Thetis Island	6	6	42	15,204	
Pender Island	6	6	42	15,204	
Saturna Island	4	4	28	10,136	
Comox	4	4	28	10,136	
Hartley Bay	4	4	28	10,136	
Pitt Meadows	2	2	14	5,068	
Tofino	2	2	14	5,068	

**This chart is based on available information from the air operator web sites.

Total of 7 Busiest sites 87% captured

Total 7 Busiest sites 89% captured

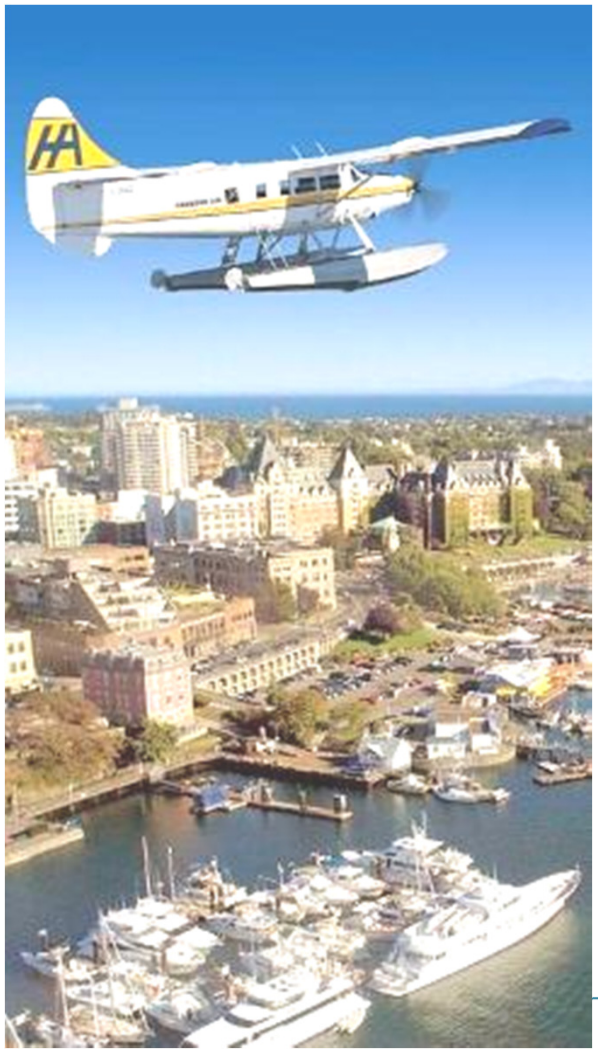
* A factor of one was used for all 703 aircraft and a factor of two was used for 704 aircraft each factor represents 7 passengers (70% load factor)

Highlights of NPA

- Applicability criteria: Options 1 and 2
- Certificate
- Physical Characteristics
- Obstacle Limitation Surfaces
- Water Airport Operations Manual
- Emergency Plan / Requirements

Highlights of NPA: Applicability Criteria

- Option 1 (estimated 48 sites):
  - Built-up of city or town; or
  - Scheduled passenger service; or
  - Public Interest
- Option 2 (estimated 23 sites):
  - Built-up of city or town; or
  - Greater than 14 scheduled passengers flights per day; or
  - Receive aircraft with nine or more passenger seats; or
  - Public Interest



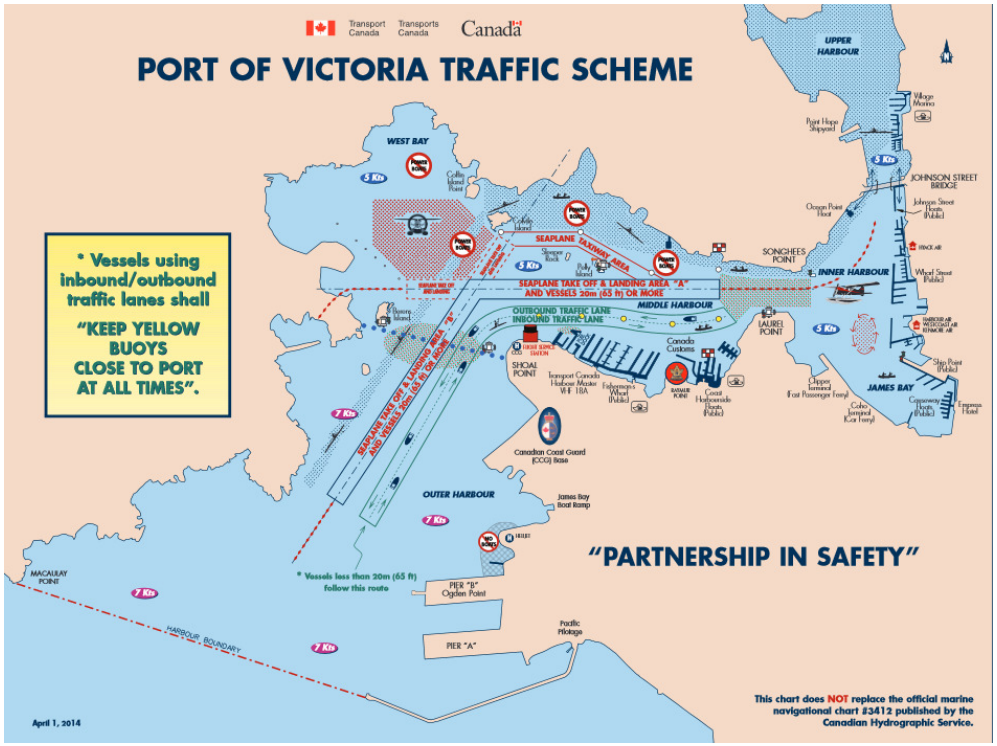
Highlights of NPA: Certificate Holders

It is anticipated that Certificate holders will be:

- Municipalities, port authorities, marinas, or third parties
- Consortium of Air Operators or third party group
- Single Air Operator (case by case)

Highlights of NPA: Physical Characteristics

- Channel – (minimum) 800m long by 120m wide
- Water depth – min 1.8m (6 feet)
- Width of taxi ways, ramps, size of turning basins
- Shore facilities – dock, wharf, ramp, beach



Highlights of NPA: Obstacle Limitation Surfaces

Take off and approach surface

- Straight In
- Offset
- Curved
- One directional - option

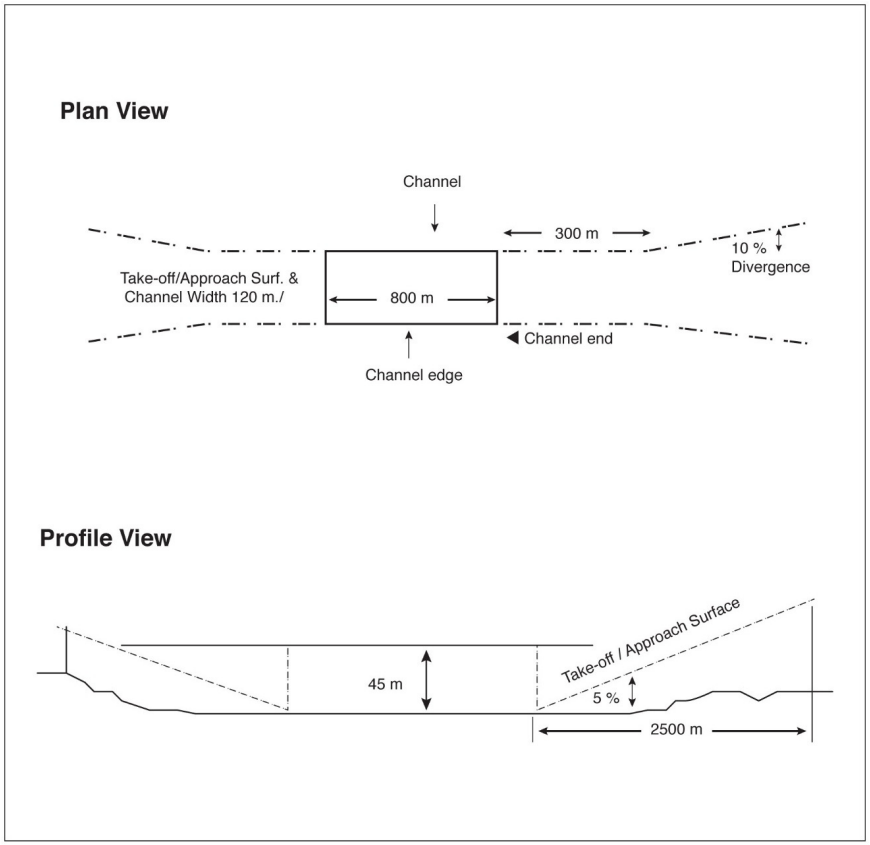


Figure 2
Obstacle Limitation Surfaces

Highlights of NPA: Operations Manual

The Water Airport Operations Manual is an approved and controlled document that describes to the Minister of Transport how the Water Airport will conduct day to day activities as per the conditions set in their Water Airport Certificate. It would contain, among other things:

- A description of the physical characteristics and water airport boundary;
- The level of service and the types of services that would be provided;
- The largest aircraft that is intended to be used at the water airport;
- A description of the organizational structure;
- A description of the operational procedures; and
- A copy of any agreement or memorandum of understanding that affects the operation of the water airport, including emergency services.

Highlights of NPA: Emergency Plan

- The water airport operator will consult with air operators that use the water airport, marine operators, air navigation services provider and community agencies, develop and maintain a Water Airport Emergency Plan (WAEP)
- Review the WAEP on an annual basis and update as necessary
- Conduct a test of the WAEP not exceeding 3 years
- The operator will ensure that the WAEP includes preparation for multiple types of emergencies
- Identify agencies which would be of assistance to the water airport operator in responding to an emergency at the water airport

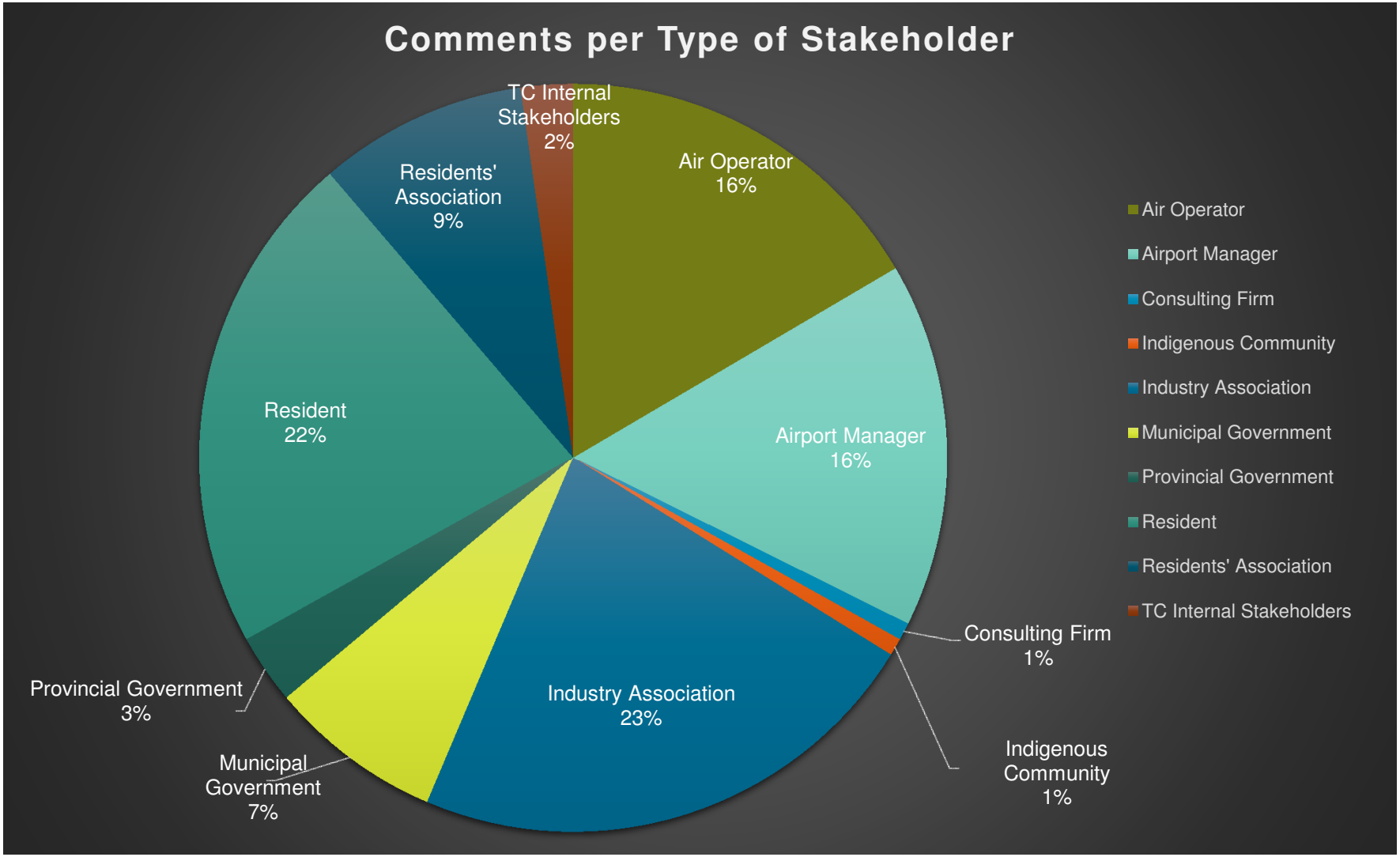
Water Airports Consultation

Canadian Aviation Regulations Aviation Council (CARAC)

Transport Canada Transports Canada

Canada

Consultation Results - Overview



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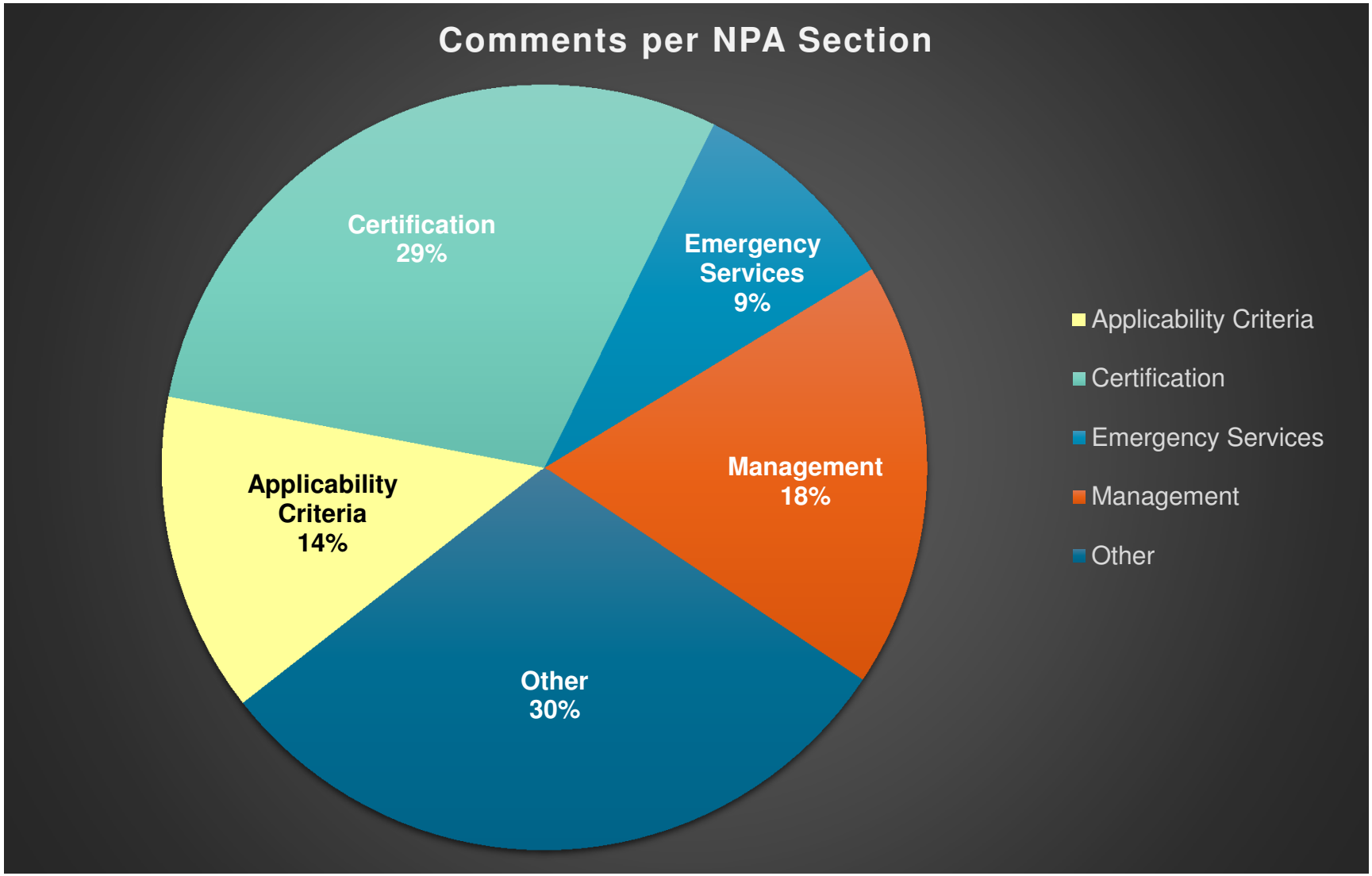

Applicability Criteria: Comments Received

- Only one comment specified a preferred approach (Option 1).
- Comments asked for clarification on criteria concepts (e.g., definitions of built-up area, scheduled service and aircraft movement);

Applicability Criteria: Comments Received

Several stakeholders suggested alternative criteria, such as:

1. Modify option 1 by making the criteria cumulative (scheduled service + built-up area).
2. Use a multi-criteria option (14 scheduled flights/day + 25,000 passengers/year + complex infrastructure + active marine operations + an interested potential certification holder).
3. Require certification based on a site risk assessment.
4. Use total annual passengers threshold (all types of operations – no threshold suggested) .
5. Standardize criteria with CARs 703 and CARs 704.
6. Certify the Air Operators instead.

Applicability Criteria: TC Response

Guiding principles:

- Protection of workers, passengers, and the public; standardized minimum level of safety; no loopholes that could be used to avoid certification.

Criteria:

- Criteria would be applied across water airports.
- TC is looking at mechanism to address sites that may exceed the certification threshold of option #2 on a temporary basis or unforeseen circumstances in a calendar year.
- Further consultations may be required with individual air operators or water airports to obtain data to support changes.

Definitions:

- TC will clarify applicability criteria as required.

Certification Requirements: Comments Received

Certificate Holder

- Who would be the certificate holder?

Continuity of the Water Airport operations

- What if nobody seeks initial certification?
- What if a certificate owner decides to return or transfer its certificate, especially where there is no other potential certificate owner to take over?

Cost of certification

- Expectations that the costs would be high.
- Expectations that costs would outweight the benefits.

Certification Requirements: TC Response

Certificate holder

- Each site would require a certificate holder.
- Certificate holders would be:
  - Municipalities, port authorities, marinas, or third parties;
  - Consortiums of Air Operators or third party group;
  - Single Air Operator (Case by case).

Continuity of the WA operations

- Not being certified (or losing certification) would lead to:
  - Option 1: The elimination of scheduled passenger service to the site; or
  - Option 2: A limitation of the number of scheduled passenger flights to the site and size of aircraft used.

Cost of certification

- The highest costs are expected to be for the site survey and for a safety boat.
- TC will be conducting a Cost-Benefit Analysis. In-scope sites will be consulted on the expected costs and benefits of the proposed regulations.

Certification Requirements: Comments received

Physical characteristics

- A definition for “Water airport boundaries” was requested; and
- “Obstacle limitation surface,” (OLS) was misunderstood as referring to obstacles in the water; rather than obstacles above the surface in the approach and departure path.

Certification Requirements: TC Response

Water airport boundaries

- Boundaries are defined on a case-by-case basis.
- Would need to consult with local government when defining boundaries.

Obstacle limitation surface

- Applies to obstacles obstructing the approach/landing areas (in the air). Examples include:
  - Trees, buildings or other permanent structures;
  - Presence of a crane, overhead wires, or bridges.

Certification Process: Comments Received

Certification process for existing water airports

- Some requested certification granted on the basis of existing certificates.
- Others suggested that new certification requirements (new study and survey) be required.

Timeline

- No timeline to reach compliance was specified.

Certification Requirements: TC Response

Water airport certification

- Existing water airports will need to comply with the regulations and meet all new requirements upon the coming into force date.

Timeline to comply with new regulations

- All water airports would have one year after the Regulations are published to meet the new requirements.

Safety Requirements: Comments Received

Emergency Services

- The need for an WAEP was questioned.
  - Water Airports are not the first responder
  - There are many responders involved: Water airport, municipal fire department (if any), DND, Canadian Coast Guard;
- What would be the requirements for airports that do not benefit from a local fire service?
- Will there be a requirement for water airports to have their own funded and dedicated fire department?
- It was suggested to add a requirement for the conduction of in-situ on water exercises to test the effectiveness of the WAEP.

Safety Requirements: TC Response

Water Airport Emergency Plan

- Procedures need to be in place to determine the course of action in case of an emergency. The WAEP would include, for instance, an up-to-date list of contacts to activate the plan.

Equipment required

- First aid kit, fire extinguisher, absorbent material for an oil of fuel spill, a lifeline or life buoy, a long pole and boat(s) would be required, to provide assistance until first responders arrive on site.
- Personnel available during operating hours that are trained and certified to operate the boat and hold a valid basic first aid qualification.

Additional Concerns Raised: Feedback received

- Additional consultation are requested.
- 2019 NPA timing was not well chosen.
- Compliance and enforcement elements were not covered in the NPA.
- Noise and emissions from seaplanes/floatplanes

Additional Concerns Raised: TC Response

Timing of Consultations

- TC recognizes that consulting during the summer was not ideal as it is the high season.
- TC will try its best to avoid detailed consultations during peak periods, or provide a longer comment period in these times.

Compliance / Enforcement

- Once the regulations are refined, provisions will be designated for compliance and enforcement.
- Compliance and enforcement to be dealt with through certification and inspections.

Noise and Emissions

- Regulated under CAR 602.105, which allows noise abatement procedures to be established through the *Canada Air Pilot* and *Canada Flight Supplement*.
- Guidelines on development are part of AC 302-002 “Implementation of New or Amended Noise Abatement Procedures”

The Way Forward

Up to 2010	Early policy development
	Early consultations (NPA 1999-280)
2010-2019	Policy approach evolves
2019	Consultation on the new approach (NPA 2019-014) and policy refinement
2020	Other consultations to come
2020	Consultation through pre-publication in the *Canada Gazette*, Part I
2021	Publication in *Canada Gazette,* Part II
2022	Water airports certified

Further Consultations

- A Cost-Benefit Analysis (CBA) consultation will take place in 2020.
- Additional consultations may be organized if required, specifically to obtain more information on water aerodrome operations, and potential costs of certification.
- Stakeholders will also be consulted through pre-publication in *Canada Gazette*, Part I (Late 2020)
- The proposed amendment will become regulations only upon publication in *Canada Gazette*, Part II.
    - Allowing time for stakeholder comment and feedback through *Canada Gazette*, Part I in advance of the final regulations being published.

Interested parties' views and comments

Questions and comments