

Durette, Maryse

From: Durette, Maryse
Sent: March 29, 2012 3:52 PM
To: Akers, Brayden; Barrette, Catherine; Betz, Catherine; Biguzs, Anita; Blake, Rebecca; Borges, Helena; Burr, Kristine; Carter, André-Alexandre; Dean, Christine; DL OTT AE Client Services - All; DL OTT AE MEDIA RELATIONS & MONITORING - RELATIONS MÉDIAS & SUIVI MÉDIATIQUE ; DL OTT AE Regions All Staff; Dugas, Dan; Fortin, Benoît; Gagnon, Doreen; Gauthier, Lynn; Hannoush, André; Lapointe, André; Leclerc, Christiane; Mcdonald, Gerard; Moreau, Rémi; Morency, Andre; Paradis, Michel; Pettit, Taylor; Proulx, Jason ; Rudge, Tamara; Schneider, Vanessa; Sicard, Geneviève; Simard, Marie-Eve; Trujillo, Alejandra; von Meyenfeldt, David
Subject: Rapport d'appel média - Les drones

Demande médiatique

Provenance de l'appel: s.19(1)

[REDACTED]
L'Actualité

Sujet:

Les drones

Date et heure de la demande:

3/26/2012 2:55:00 PM

Date et heure de la réponse:

3/29/2012 3:49:00 PM

Ton:

Neutre

Secteur d'activité:

Sécurité: Aviation civile

Question:

J'aimerais avoir les réponses aux questions suivantes :

Q1 - Quelles sont les grandes lignes de la réglementation sur l'utilisation des drones au Canada ?

Q2 - Est-ce qu'il y a des plaintes qui ont été rapportés concernant les drones au Canada ?

Q3 - Est-ce que la réglementation ressemble à celle de la FAA (USA) au Canada ? Si non, est-ce qu'elle compte bientôt l'imiter ?

Q4 - Quelles sont les limites à l'utilisation des drones ?

Q5 - Est-ce que la réglementation est appelée à se resserrer ou à devenir plus libéral pour laisser place à l'innovation et donner libre cours aux nouvelles utilités pratiques?

Q6 - Pouvez-vous me citer quelques exemples concrets de l'utilisation de ces drones ? (Projets en cours ou à venir.)

Q7 - Combien de permis (COAS ?) sont délivrés au Canada permettant l'utilisation des drones ?

Q8 - Quelles sont les mesures prises pour limiter l'impact sur la vie privée ?

Q9 - Est-ce que vous réglementer également les jouets AR drones, permettant à qui le veut de piloter un drone à l'aide d'un Iphone? <http://ardrone.parrot.com/parrot-ar-drone/fr/>

Réponse:

Q1. Quelles sont les grandes lignes de la réglementation sur l'utilisation des drones au Canada ?

L'utilisation des véhicules aériens non habités (UAV) a été approuvée le 10 octobre 1996, à l'entrée en vigueur du Règlement de l'aviation canadien. Voici le lien vers l'article pertinent du Règlement :
http://www.tc.gc.ca/fra/aviationcivile/servreg/rac/partie6-602-2436.htm#602_41.

Pour plus de renseignements, veuillez consulter la page Web de Transports Canada sur les véhicules aériens non habités : <http://www.tc.gc.ca/fra/aviationcivile/normes/generale-aviationloisir-pamphlets-vehicule-2270.htm>

Q2 - Est-ce qu'il y a des plaintes qui ont été rapportés concernant les drones au Canada ?

Transports Canada n'a eu connaissance d'aucune plainte au sujet des UAV.

Q3 - Est-ce que la réglementation ressemble à celle de la FAA (USA) au Canada ? Si non, est-ce qu'elle compte bientôt l'imiter ?

Transports Canada suit l'évolution de la nouvelle loi fédérale obligeant la Federal Aviation Administration à permettre l'utilisation de drones à des fins commerciales.

Q4. Quelles sont les limites à l'utilisation des drones ?

Les véhicules aérien non habité ne sont pas restreints par les limitations et les exigences humaines. Ils permettent de recueillir des renseignements dans des contextes dangereux sans risque pour l'équipage de conduite. Ils peuvent être beaucoup plus économiques que les aéronefs avec pilote. Toutefois, les coûts de réparation ou de remplacement des aéronefs endommagés pendant le vol peuvent être très élevés.

Q5 - Est-ce que la réglementation est appelée à se resserrer ou à devenir plus libérale pour laisser place à l'innovation et donner libre cours aux nouvelles utilités pratiques?

Transports Canada est responsable de la surveillance de l'exploitation des véhicules aériens civils non habités. Ces véhicules sont des « aéronefs » selon la définition figurant dans la Loi sur l'aéronautique et ils sont régis par le Règlement de l'aviation canadien, lorsqu'ils sont exploités dans l'espace aérien du Canada. Les véhicules aériens non habités peuvent être téléguidés ou avoir une capacité d'autonomie de vol.

Conformément à la politique de Transports Canada, les niveaux de sécurité des véhicules aériens non habités qui sont exploités au Canada doivent être « équivalents » à ceux des aéronefs habités. En raison de la diversité des véhicules aériens non habités en ce qui concerne la complexité, les limites et les besoins opérationnels, une évaluation individuelle est requise pour chaque opération. Par ailleurs, les exploitants de véhicules aériens non habités doivent détenir un certificat d'opérations aériennes spécialisées délivré par le Ministre.

Q6. Pouvez-vous me citer quelques exemples concrets de l'utilisation de ces drones ? (Projets en cours ou à venir.)

Les véhicules aériens non habités sont utilisés dans des contextes divers et dans des rôles à haut risque, notamment : la recherche atmosphérique (y compris la météorologie et l'échantillonnage de gaz atmosphériques), la recherche scientifique, la recherche océanographique, la recherche géophysique, la prospection minérale, la radiométrie spectrale imageante, les plates-formes de relais de télécommunications, la surveillance policière, les patrouilles et la reconnaissance frontalières, les relevés et inspections de lignes électriques éloignées et de pipelines, la surveillance de la circulation et des accidents, la surveillance des urgences et des catastrophes, la cartographie et la représentation sol, la recherche et sauvetage, l'épandage agricole, la photographie aérienne, la promotion et la publicité, la reconnaissance météorologique, la recherche en vol et la surveillance et la gestion de la lutte contre les incendies.

Q7. Combien de permis (COAS ?) sont délivrés au Canada permettant l'utilisation des drones ?

Entre janvier 2007 et janvier 2012, Transports Canada a délivré des certificats d'opérations aériennes spécialisées pour l'utilisation d'UAV à 293 demandeurs.

Q8 - Quelles sont les mesures prises pour limiter l'impact sur la vie privée ?

Le processus de demande de certificats d'opérations aériennes spécialisées au Canada autorise un exploitant d'aéronef non habité à recevoir un certificat d'exploitation que s'il est démontré que les risques inhérents à son utilisation, pour les personnes, les biens au sol ou les utilisateurs de l'espace aérien, peuvent être confinés à un niveau acceptable. Un grand nombre de services aériens peuvent être offerts grâce aux aéronefs non habités, et chaque utilisation fait l'objet d'évaluations individuelles des risques possibles.

Q9. Est-ce que vous réglementer également les jouets AR drones, permettant à qui le veut de piloter un drone à l'aide d'un Iphone? <http://ardrone.parrot.com/parrot-ar-drone/fr/>

L'aéronef Parrot AR Drone correspond à la définition de « modèle réduit d'aéronef » aux termes du Règlement de l'aviation canadien. À ce titre, l'utilisation de ce type d'aéronefs ne nécessite pas de certificat d'opérations aériennes spécialisées, car ils sont utilisés par des amateurs de cette activité à des fins de loisirs et de divertissement personnel, et non dans le but d'obtenir de l'argent ou toute autre forme de rémunération. Toutefois, si le Parrot AR Drone était utilisé à des fins autres que de loisirs, il serait considéré comme un aéronef non habité et nécessiterait un certificat d'exploitation.

Qu'est-ce qui a suscité l'intérêt des médias?:

Enquête par un journaliste

En consultation avec:

Melissa Fennell, Aviation civile;

Maryse Durette | Conseillère principale \ Senior Advisor

Relations avec les médias \ Media Relations 613-993-0055

Transport Canada / Place de Ville (Tour C), Ottawa, Ontario K1A 0N5
Transports Canada / Place de Ville (Tower C) Ottawa (Ontario) K1A 0N5
Government of Canada / Gouvernement du Canada

tel 613-998-8344 e-mail maryse.durette@tc.gc.ca

4

Durette, Maryse

From: Durette, Maryse
Sent: March 8, 2012 3:40 PM
To: Akers, Brayden; Barrette, Catherine; Betz, Catherine; Biguzs, Anita; Blake, Rebecca; Borges, Helena; Burr, Kristine; Carter, André-Alexandre; Dean, Christine; DL OTT AE Client Services - All; DL OTT AE MEDIA RELATIONS & MONITORING - RELATIONS MÉDIAS & SUIVI MÉDIATIQUE ; DL OTT AE Regions All Staff; Dugas, Dan; Fortin, Benoît; Gagnon, Doreen; Gauthier, Lynn; Hannoush, André; Howard, Jeff; Lapointe, André; Leclerc, Christiane; Mcdonald, Gerard; Moreau, Rémi; Morency, Andre; Paradis, Michel; Pettit, Taylor; Proulx, Jason ; Rudge, Tamara; Schneider, Vanessa; Sicard, Geneviève; Simard, Marie-Eve; Trujillo, Alejandra; von Meyenfeldt, David
Subject: Media Call Report - UAVs in Canada, Follow-up Qs

Media Call

Call received from: s.19(1)


SunMedia

Issue:

UAVs in Canada, Follow-up Qs

Call Date/time:

3/6/2012 10:59:00 AM

Response Date/time:

3/8/2012 3:33:00 PM

Tone:

Neutral

Business Line:

Safety: Civil Aviation

Question:

«When did Transport Canada approve the use of Unmanned Aerial Vehicles for commercial purposes (year/date-web link to regulations?)

What specific commercial purposes can unmanned aerial vehicles be used for in Canada?

How many licenses have been granted for the commercial use of Unmanned Aerial Vehicles in Canada?

Do we have any idea of how many UAVs are currently being used in Canada for commercial companies, and by how many different organizations?

Response:

Q1: When did Transport Canada approve the use of Unmanned Aerial Vehicles for commercial purposes (year/date-web link to regulations?)

The use of Unmanned Air Vehicles (UAVs) was approved on October 10, 1996, when the Canadian Aviation Regulations (CARs) came into effect. The applicable regulation, CAR 602.41, is copied here for ease of reference.

http://www.tc.gc.ca/eng/civilaviation/regserv/cars/part6-602-2436.htm#602_41

Q2: What specific commercial purposes can unmanned aerial vehicles be used for in Canada?

UAVs are used for both commercial and private purposes. Some examples include police work (forensics, surveillance, tactical), aerial inspection, aerial photography, geophysical surveys, research, flight demonstrations, flight testing, flight training, meteorology reconnaissance, filming for documentaries and TV commercials, student competitions and record setting (flying across the Atlantic Ocean). However, there are 293 certificates that have been issued and to provide specifics would require a manual review of the applications.

Q3: How many licenses have been granted for the commercial use of Unmanned Aerial Vehicles in Canada?

The licenses for UAVs are called Special Flight Operations Certificates (SFOCs). Between January 2007 and January 2012, Transport Canada has provided Special Flight Operations Certificates for UAV operations to 293 applicants.

The review and processing of an application for a Special Flight Operations Certificate for the operation of an Unmanned Air Vehicle (UAV) System can be found at:

<http://www.tc.gc.ca/eng/civilaviation/opssvs/managementservices-referencecentre-documents-600-623-001-972.htm>

Q4: Do we have any idea of how many UAVs are currently being used in Canada for commercial companies, and by how many different organizations?

Between January 2007 to January 2012, 293 applicants were issued SFOCs, allowing for approximately 1,000 UAVs. There are a number of large and small Canadian companies involved in UAV operations, as well as several universities.

What triggered the reporter's interest?:

Investigation by reporter

In consultation with:

Mélanie Drouin & Patsy Lamothe, A/Civil Aviation;

Maryse Durette | Conseillère principale\Senior Advisor

Relations avec les médias\Media Relations 613-993-0055

Transport Canada / Place de Ville (Tour C), Ottawa, Ontario K1A 0N5
Transports Canada / Place de Ville (Tower C) Ottawa (Ontario) K1A 0N5
Government of Canada / Gouvernement du Canada

tel 613-998-8344 e-mail maryse.durette@tc.gc.ca

Media Call

Call received from: s.19(1)


SunMedia

Issue:

Unmanned Aerial Vehicles (UAVs)

Call Date/time:

3/2/2012 4:59:00 PM

Response Date/time:

3/6/2012 11:08:00 AM

Tone:

Neutral

Business Line:

Safety: Civil Aviation

Question:

Reporter wrote directly to MO:

« I am working on a story about Canadian drone technology and regulations for commercial use, and I am wondering if you can help me out. I want to know:

how many certificate have been granted by the federal government for commercial use of unmanned aerial systems? »

Response:

From Jan. 2007 to Jan. 2012, Transport Canada has provided Special Flight Operations Certificates for UAV operations to 293 applicants.

What triggered the reporter's interest?:

Follow-up story from previous coverage

Deadline:

3/6/2012

In consultation with:

Melissa Fennell, Civil Aviation; Mélanie Drouin/Patsy Lamothe, A/Civil Aviation;

Durette, Maryse

From: Durette, Maryse
Sent: February 28, 2012 4:16 PM
To: Akers, Brayden; Barrette, Catherine; Betz, Catherine; Biguzs, Anita; Blake, Rebecca; Borges, Helena; Burr, Kristine; Carter, André-Alexandre; Cato, Nathan; Dean, Christine; DL OTT AE Client Services - All; DL OTT AE MEDIA RELATIONS & MONITORING - RELATIONS MÉDIAS & SUIVI MÉDIATIQUE ; DL OTT AE Regions All Staff; Dugas, Dan; Floréa, Pierre; Fortin, Benoît; Gagnon, Doreen; Gauthier, Lynn; Hannoush, André; Howard, Jeff; Lapointe, André; Leclerc, Christiane; Mcdonald, Gerard; Moreau, Rémi; Morency, Andre; Paradis, Michel; Pettit, Taylor; Proulx, Jason ; Rudge, Tamara; Schneider, Vanessa; Sicard, Geneviève; Simard, Marie-Eve; Trujillo, Alejandra; von Meyenfeldt, David
Subject: Rapport d'appel média - Les drones

Demande médiatique

Provenance de l'appel: s.19(1)


Radio-Canada Radio 'Les années lumière'

Sujet:

Les drones

Date et heure de la demande:

2/28/2012 9:29:00 AM

Date et heure de la réponse:

2/28/2012 4:14:00 PM

Ton:

Neutre

Secteur d'activité:

Sécurité: Aviation civile

Question:

Le journaliste de l'émission radiophonique scientifique s'intéresse aux 'véhicules aérien non piloté', communément appelés drones ou UAV, et mentionne un article du NY Times (voir lien Q5). Il a envoyé ses questions par courriel :

«Q1. Est-ce que l'utilisation de drones (engins volants) est permise au Canada ?

Q2. Si oui, où est-elle permise ? (villes ? Zones rurales ?)

Q3. Si oui est-ce seulement réservé aux forces de l'ordre ? Les civils peuvent-ils en faire voler ?

Q4. Quelles sont les dispositions législatives applicables ?

Q5. Est-ce que quelqu'un à Transport Canada suit ce qui est en train d'arriver aux États-Unis sur ce sujet ?
<http://www.nytimes.com/2012/02/18/technology/drones-with-an-eye-on-the-public-cleared-to-fly.html> Si oui, serait-il possible d'avoir une entrevue avec cette personne ?»

Réponse:

Q1. Est-ce que l'utilisation de drones (engins volants) est permise au Canada ?

Oui. L'utilisation des véhicules aériens non habités est permise au Canada. Pour plus de renseignements, veuillez consulter la page Web de Transports Canada sur les véhicules aériens non habités :

<http://www.tc.gc.ca/fra/aviationcivile/normes/generale-aviationloisir-pamphlets-vehicule-2270.htm>

Q2. Si oui, où est-elle permise ? (Villes ? Zones rurales ?)

Les véhicules aériens non habités ne sont pas restreints par les limites ou les exigences humaines. Ils permettent de recueillir des renseignements dans des contextes dangereux sans poser de risques pour l'équipage de conduite. Ils peuvent être beaucoup plus économiques que les aéronefs habités. Par conséquent, les véhicules aériens non habités sont exploités partout au Canada, y compris dans l'Arctique ainsi qu'au large des côtes du Canada.

Q3. Si oui, est-ce seulement réservé aux forces de l'ordre ? Les civils peuvent-ils en faire voler ?

Les véhicules aériens non habités sont utilisés dans des contextes divers et dans des situations à haut risque, notamment : la recherche atmosphérique (y compris la météorologie et l'échantillonnage de gaz atmosphériques), la recherche scientifique, la recherche océanographique, la recherche géophysique, la prospection minérale, la radiométrie spectrale imageante, les plates-formes de relais de télécommunications, la surveillance policière, les patrouilles et la reconnaissance frontalières, les relevés et inspections de lignes électriques éloignées et de pipelines, la surveillance de la circulation et des accidents, la surveillance des urgences et des catastrophes, la cartographie et la représentation sol, la recherche et sauvetage, l'épandage agricole, la photographie aérienne, la promotion et la publicité, la reconnaissance météorologique, la recherche en vol et la surveillance et la gestion de la lutte contre les incendies.

Q4. Quelles sont les dispositions législatives applicables ?

Transports Canada est responsable de la surveillance de l'exploitation des véhicules aériens civils non habités. Ces véhicules sont des « aéronefs » selon la définition figurant dans la Loi sur l'aéronautique et ils sont régis par le Règlement de l'aviation canadien, lorsqu'ils sont exploités dans l'espace aérien du Canada. Les véhicules aériens non habités peuvent être téléguidés ou avoir une capacité d'autonomie de vol.

Conformément à la politique de Transports Canada, les niveaux de sécurité des véhicules aériens non habités qui sont exploités au Canada doivent être « équivalents » à ceux des aéronefs habités. En raison de la diversité des véhicules aériens non habités en ce qui concerne la complexité, les limites et les besoins opérationnels, une évaluation individuelle est requise pour chaque opération. Par ailleurs, les exploitants de véhicules aériens non habités doivent détenir un certificat d'opérations aériennes spécialisées délivré par le Ministre.

Q5. Est-ce que quelqu'un à Transport Canada suit ce qui est en train d'arriver aux États-Unis sur ce sujet ?
<http://www.nytimes.com/2012/02/18/technology/drones-with-an-eye-on-the-public-cleared-to-fly.html>

Transports Canada suit l'évolution de la nouvelle loi fédérale obligeant la Federal Aviation Administration à permettre l'utilisation de drones à des fins commerciales.

Qu'est-ce qui a suscité l'intérêt des médias?:

Enquête par un journaliste

En consultation avec:

Melissa Fennell, Aviation civile;

Maryse Durette | Conseillère principale \ Senior Advisor

Relations avec les médias \ Media Relations 613-993-0055

Transport Canada / Place de Ville (Tour C), Ottawa, Ontario K1A 0N5
Transports Canada / Place de Ville (Tower C) Ottawa (Ontario) K1A 0N5
Government of Canada / Gouvernement du Canada

tel 613-998-8344 e-mail maryse.durette@tc.gc.ca

James, Kelly

From: James, Kelly
Sent: Thursday, February 23, 2012 1:50 PM
To: Fennell, Melissa; Akers, Brayden; Barrette, Catherine; Betz, Catherine; Biguzs, Anita; Blake, Rebecca; Borges, Helena; Burgess, Nicole; Burr, Kristine; Carter, André-Alexandre; Cato, Nathan; Dean, Christine; DL OTT AE Client Services - All; DL OTT AE MEDIA RELATIONS & MONITORING - RELATIONS MÉDIAS & SUIVI MÉDIATIQUE ; DL OTT AE Regions All Staff; Dube, Simon; Dugas, Dan; Floréa, Pierre; Fortin, Benoît; Gagnon, Doreen; Gauthier, Lynn; Hannoush, André; Howard, Jeff: PCA; Lapointe, André; Leclerc, Christiane; McDonald, Gerard; Morency, Andre; Paradis, Michel; Proulx, Jason: PCO; Remi Moreau; Rudge, Tamara; Schneider, Vanessa; Sicard, Geneviève; Simard, Marie-Eve; Trujillo, Alejandra; von Meyenfeldt, David
Subject: Media call report- Drone Aircrafts in Canada

Media Call

Call received from: s.19(1)


CBC Radio

Issue:

Drone Aircrafts in Canada

Call Date/time:

2/22/2012 2:09:00 PM

Response Date/time:

2/23/2012 1:48:00 PM

Tone:

Neutral

Business Line:

Safety: Civil Aviation

Question:

The reporter would like an interview regarding drone aircraft use within Canadian airspace.

Q1. What legislation covers the use of drone aircrafts in Canada?

Q2. Is drone use regulated within Canadian airspace?

Q3. What certificates & training are required to use a drone?

Q4. Are police forces allowed to use drones?

Response:

Interview was declined.

Q1. What legislation covers the use of drone aircrafts in Canada?

A1. Transport Canada is responsible for the oversight of the operation of civil Unmanned Air Vehicle's (UAVs), commonly known as drones. UAVs are "aircraft" under the definition of the Aeronautics Act and are governed by the Canadian Aviation Regulations (CARs) when operating in Canadian airspace.

Q2. Is drone use regulated within Canadian airspace?

A2. UAVs are governed by the Canadian Aviation Regulations (CARs) when operating in Canadian airspace.

It is important to note that Transport Canada is only responsible for the conduct of civil UAS operating in civil airspace or military restricted airspace.

It is Transport Canada policy that UAVs operating in Canada must meet equivalent levels of safety as manned aircraft. With UAVs being so diverse in terms of operational complexity, limitations and needs, individual assessments are conducted for each operation.

Q3. What certificates & training are required to use a drone?

A3. In Canada, individuals conducting UAV operations are required to obtain and comply with the provisions of a Special Flight Operations Certificate (SFOC), as outlined in section 602.41 of the CARs. UAVs require a Special Flight Operations Certificate (SFOC) issued by the Minister to fly.

Q4. Are police forces allowed to use drones?

A4. Police forces are permitted to use drones provided they comply with Transport Canada regulations and obtain the required SFOC.

What triggered the reporter's interest?:

Investigation by reporter

Deadline:

2/23/2012

In consultation with:

Melissa Fennell, Civil Aviation;

Durette, Maryse

From: Durette, Maryse
Sent: January 18, 2012 4:12 PM
To: Akers, Brayden; Barrette, Catherine; Betz, Catherine; Biguzs, Anita; Blake, Rebecca; Borges, Helena; Burr, Kristine; Carter, André-Alexandre; Cato, Nathan; Dean, Christine; DL OTT AE Client Services - All; DL OTT AE MEDIA RELATIONS & MONITORING - RELATIONS MÉDIAS & SUIVI MÉDIATIQUE ; DL OTT AE Regions All Staff; Dugas, Dan; Floréa, Pierre; Fortin, Benoît; Gagnon, Doreen; Gauthier, Lynn; Hannoush, André; Howard, Jeff; Lapointe, André; Leclerc, Christiane; Mcdonald, Gerard; Morency, Andre; Paradis, Michel; Payette, Louise; Proulx, Jason ; Rudge, Tamara; Schneider, Vanessa; Simard, Marie-Eve; Trujillo, Alejandra; von Meyenfeldt, David
Subject: Media Call Report - Unmanned Aerial Vehicles (UAVs) follow-up

Media Call

s.19(1)

Call received from:


Globe and Mail

Issue:

Unmanned Aerial Vehicles (UAVs) follow-up

Call Date/time:

1/16/2012 12:51:00 PM

Tone:

Neutral

Business Line:

Safety: Civil Aviation

Question:

We provided answers to reporter on this issue (see media call report below signature). He e-mailed a follow-up question:

«Q1 - Can an individual fly multiple UAVs on a single SFOC ? Or is it one SFOC per UAV basically? i.e. If I'm a research scientist studying caribou in Nunavut, and I have a big UAV and a small UAV, do I need a permit for each one? »

Response:

The Special Flight Operations Certificates (SFOC) will indicate if the applicant can operate one or more UAV.

What triggered the reporter's interest?:

Investigation by reporter

Deadline:

1/16/2012

In consultation with:

Carl Guignion, Civil Aviation;

Maryse Durette | Conseillère principale\Senior Advisor

Relations avec les médias\Media Relations 613-993-0055

Transport Canada / Place de Ville (Tour C), Ottawa, Ontario K1A 0N5
Transports Canada / Place de Ville (Tower C) Ottawa (Ontario) K1A 0N5
Government of Canada Gouvernement du Canada

tel 613-998-8344 e-mail maryse.durette@tc.gc.ca

Media Call

s.19(1)

Call received from:



Globe and Mail

Issue:

Unmanned Aerial Vehicles (UAVs)

Call Date/time:

1/10/2012 4:03:00 PM

Response Date/time:

1/12/2012 4:59:00 PM

Tone:

Neutral

Business Line:

Safety: Civil Aviation

Question:

15

The reporter is preparing a story about UAV permits granted by TC over the last 5 years.

Q1. Can TC provide a 5 year breakdown of the number of UAV permits granted by the department?

Q2. If possible, Can TC provide a 5 year breakdown of the number of UAV permits rejected by the department?

Response:

The permits for unmanned air vehicles (UAV) are called Special Flight Operations Certificates. Since January 1, 2007, Transport Canada has provided Special Flight Operations Certificates for UAV operations to 293 applicants (breakdown by region below). Since January 1, 2007, Transport Canada has rejected 14 requests for Special Flight Operations Certificates for UAVs.

The review and processing of an application for a Special Flight Operations Certificate for the Operation of an Unmanned Air Vehicle (UAV) System can be found at:

<http://www.tc.gc.ca/eng/civilaviation/opssvs/managementservices-referencecentre-documents-600-623-001-972.htm>

UAV permits issued/ rejected since 2006-07 (note, some regions track by fiscal year, others by calendar year):

Atlantic Region 63 issued, 0 rejected.

Quebec Region 39 issued, 5 rejected.

Prairie and Northern Region 53 issued (in fiscal year 2011-12 only) 0 rejected.*

*Note: Because there is no one single database to track the issuance of SFOCs for UAV operations, region cannot provide information going back five years by requested deadline. If the reporter would like this information, more time is required to compile it.

Pacific Region 51 issued, 0 rejected.

Ontario Region 87 issued, 9 rejected.

Note: TC sets conditions for safety and if the applicant meets the conditions, an SFOC is issued. Typically the applicant contacts TC prior to applying and TC inspectors council the applicant on safe operations (what can be done/what can't be done) before the application is filled out.

What triggered the reporter's interest?:

Investigation by reporter

In consultation with:

Mélanie Drouin/Phil Jenkins, A\Civil Aviation;

Durette, Maryse

From: Durette, Maryse
Sent: January 13, 2012 9:18 AM
To: Akers, Brayden; Barrette, Catherine; Betz, Catherine; Biguzs, Anita; Blake, Rebecca; Borges, Helena; Burr, Kristine; Carter, André-Alexandre; Cato, Nathan; Dean, Christine; DL OTT AE Client Services - All; DL OTT AE MEDIA RELATIONS & MONITORING - RELATIONS MÉDIAS & SUIVI MÉDIATIQUE ; DL OTT AE Regions All Staff; Dugas, Dan; Floréa, Pierre; Fortin, Benoît; Gagnon, Doreen; Gauthier, Lynn; Hannoush, André; Howard, Jeff; Lapointe, André; Leclerc, Christiane; Mcdonald, Gerard; Morency, Andre; Paradis, Michel; Payette, Louise; Proulx, Jason ; Rudge, Tamara; Schneider, Vanessa; Simard, Marie-Eve; Trujillo, Alejandra; von Meyenfeldt, David
Subject: Media Call Report - Unmanned Aerial Vehicles (UAVs)

Media Call

s.19(1)

Call received from:


Globe and Mail

Issue:

Unmanned Aerial Vehicles (UAVs)

Call Date/time:

1/10/2012 4:03:00 PM

Response Date/time:

1/12/2012 4:59:00 PM

Tone:

Neutral

Business Line:

Safety: Civil Aviation

Question:

The reporter is preparing a story about UAV permits granted by TC over the last 5 years.

Q1. Can TC provide a 5 year breakdown of the number of UAV permits granted by the department?

Q2. If possible, Can TC provide a 5 year breakdown of the number of UAV permits rejected by the department?

17

Response:

The permits for unmanned air vehicles (UAV) are called Special Flight Operations Certificates. Since January 1, 2007, Transport Canada has provided Special Flight Operations Certificates for UAV operations to 293 applicants (breakdown by region below). Since January 1, 2007, Transport Canada has rejected 14 requests for Special Flight Operations Certificates for UAVs.

The review and processing of an application for a Special Flight Operations Certificate for the Operation of an Unmanned Air Vehicle (UAV) System can be found at:

<http://www.tc.gc.ca/eng/civilaviation/opssvs/managementservices-referencecentre-documents-600-623-001-972.htm>

UAV permits issued/ rejected since 2006-07 (note, some regions track by fiscal year, others by calendar year):

Atlantic Region 63 issued, 0 rejected.

Quebec Region 39 issued, 5 rejected.

Prairie and Northern Region 53 issued (in fiscal year 2011-12 only) 0 rejected.*

*Note: Because there is no one single database to track the issuance of SFOCs for UAV operations, region cannot provide information going back five years by requested deadline. If the reporter would like this information, more time is required to compile it.

Pacific Region 51 issued, 0 rejected.

Ontario Region 87 issued, 9 rejected.

Note: TC sets conditions for safety and if the applicant meets the conditions, an SFOC is issued. Typically the applicant contacts TC prior to applying and TC inspectors council the applicant on safe operations (what can be done/what can't be done) before the application is filled out.

What triggered the reporter's interest?:

Investigation by reporter

In consultation with:

Carl Guignon, Civil Aviation;

Maryse Durette | Conseillère principale / Senior Advisor

Relations avec les médias / Media Relations 613-993-0055

Transport Canada / Place de Ville (Tour C), Ottawa, Ontario K1A 0N5
Transports Canada / Place de Ville (Tower C) Ottawa (Ontario) K1A 0N5
Government of Canada / Gouvernement du Canada

tel 613-998-8344 e-mail maryse.durette@tc.gc.ca

s.19(1)

Media: [REDACTED] at the Globe & Mail

Issue: Unmanned Aerial Vehicles (UAVs)

Reporter Deadline: January 12, 2011

Questions: The reporter is preparing a story about UAV permits granted by TC over the last 5 years.

Q1. Can TC provide a 5 year breakdown of the number of UAV permits granted by the department?

Q2. If possible, Can TC provide a 5 year breakdown of the number of UAV permits rejected by the department?

Proposed answers: The permits for unmanned air vehicles (UAV) are called Special Flight Operations Certificates. Since January 1, 2007, Transport Canada has provided Special Flight Operations Certificates for UAV operations to **293 applicants (breakdown by region below)**. Since January 1, 2007, Transport Canada has rejected **14** requests for Special Flight Operations Certificates for UAVs.

The review and processing of an application for a Special Flight Operations Certificate for the Operation of an Unmanned Air Vehicle (UAV) System can be found at:

<http://www.tc.gc.ca/eng/civilaviation/opssvs/managementservices-referencecentre-documents-600-623-001-972.htm>

UAV permits issued/ rejected since 2006-07 (note, some regions track by fiscal year, others by calendar year):

Atlantic Region 63 issued, 0 rejected.

Quebec Region 39 issued, 5 rejected.

Prairie and Northern Region 53 issued (in fiscal year 2011-12 only) 0 rejected.*

***Note:** Because there is no one single database to track the issuance of SFOCs for UAV operations nationally (or regionally in PNR), they cannot provide information going back five years by requested deadline. If the reporter would like this information, more time is required to compile it.

Pacific Region 51 issued, 0 rejected.

Ontario Region 87 issued, 9 rejected.

Note: TC sets conditions for safety and if the applicant meets the conditions, an SFOC is issued. Typically the applicant contacts TC prior to applying and TC inspectors council the applicant on safe operations (what can be done/what can't be done) before the application is filled out.

s.19(1)

Reporter: [REDACTED] UBC's Thunderbird online newspaper [REDACTED]
Deadline to Communications: COB, Wednesday, March 21

Issue: Unmanned Air Vehicles

Questions:

1) When did Transport Canada last update its rules and regulations regarding the use of UAVs in Canada? In other words, when were Special Flight Operations Certificates last updated to include UAVs?

A1. The use of Unmanned Air Vehicles (UAVs) was approved on October 10, 1996, when the Canadian Aviation Regulations (CARs) came into effect. The applicable regulation can be found here: http://www.tc.gc.ca/eng/civilaviation/regserv/cars/part6-602-2436.htm#602_41

2) What are Transport Canada's plans for further updating these rules and regulations as more individuals, groups, and organizations begin using UAVs? What will these regulations look like? The American Federal Aviation Administration will be updating their UAV flight regulations through 2015. What effect, if any, will this have on UAV regulations in Canada?

In June 2010, the department initiated a working group to make recommendations for the safe integration of routine UAV operations in Canadian airspace. The Working Group combines expertise from all areas of the aviation community.

Transport Canada also participates in the International Civil Aviation Organization (ICAO) Unmanned Aircraft Systems Study Group (UASSG).

The department will monitor the development of the Federal Aviation Administration UAV flight regulations. Transport Canada will continue to work cooperatively with the UAV community and will work diligently to develop and implement regulations to ensure the highest level of safety and efficiency in aviation.

Q3. How many Special Flight Operations Certificates have been issued to UAV operators over the past few years?

A3. Between January 2007 and January 2012, Transport Canada issued Special Flight Operations Certificates for UAV operations to 293 applicants.

Q4. Where can I find the names of the individuals, groups, and organizations who have obtained SFOCs?

A4. There is no centralised list of Special Flight Operation Certificate (SFOCs) holders.

Q5. It is my understanding that Transport Canada collects information on UAV operations (i.e. crashes, etc.). Where can I obtain this information?

A5. There is no centralised list.

s.19(1)

MEDIA CALL

Media: [REDACTED] Sun News

Issue: UAVs

Deadline: TBD

Questions Reporter wrote directly to MO:

« I am working on a story about Canadian drone technology and regulations for commercial use, and I am wondering if you can help me out. I want to know: how many certificate have been granted by the federal government for commercial use of unmanned aerial systems? » I have also left a message to reporter to confirm deadline and see if she has more questions.

For Response:

Q1. How many certificate have been granted by the federal government for commercial use of unmanned aerial systems?

A1. The permits for unmanned air vehicles (UAV) are called Special Flight Operations Certificates. Between January 2007 and January 2012, Transport Canada has provided Special Flight Operations Certificates for UAV operations to **293 applicants**.

The review and processing of an application for a Special Flight Operations Certificate for the Operation of an Unmanned Air Vehicle (UAV) System can be found at:

<http://www.tc.gc.ca/eng/civilaviation/opssvs/managementservices-referencecentre-documents-600-623-001-972.htm>

ISSUE PAPER

DESIGNATION OF CLASS F RESTRICTED AIRSPACE UNMANNED AIRCRAFT SYSTEM OPERATIONS

ISSUE:

Transport Canada, Standards Branch, has been receiving an increasing number of requests and proposals from both unmanned aircraft system commercial operators and provincial governments to establish dedicated Class F restricted airspace for the purpose of conducting visual line-of-sight and beyond visual line-of-sight unmanned aircraft civil operations. To date,

s.21(1)(a)

To date, Transport Canada's policy on Class F restricted airspace has been to minimize airspace restrictions to the extent possible. Canadian airspace essentially belongs to the citizens of Canada and they are given equal access.

BACKGROUND:

Airspace restrictions, by definition, are, to a greater or lesser extent, a restriction of the rights and freedoms of a person or persons to operate within portions of the Canadian national airspace system. As airspace restrictions impose a regulatory requirement on users of the national airspace system, the Government of Canada Regulatory Policy Processes must be followed when restrictions are made.

The regulatory authority to restrict airspace is the federal authority vested in the Minister of Transport through the *Aeronautics Act* (with one current exception – Airspace Restrictions for Parks, Wildlife Refuges and Farms). Restricted airspace will be designated or established only where it is essential and practical to do so for aviation safety and/or security, national security, for public health/safety/security and/or for public interest reasons.

In order to maintain a uniform application of airspace restrictions nationally, the authority to designate Class F Restricted airspace in the *Designated Airspace Handbook* (DAH) is delegated to the Chief of Standards, Aerodromes and Air Navigation, in Headquarters.

Class F Restricted airspace, in the DAH, may be designated for a specified volume of airspace, up to and including the entire national airspace system and designation allows:

- a) Control of access, prohibiting operation either totally or by certain aircraft;
- b) Control of a specific activity; and/or
- c) Implementation of specific operational procedures.

DRAFT – SEPT 5, 2011 (DM)

Basic flight regulatory principles demand that aircraft can fly only if they are marked, registered, designed, manufactured, operated and maintained consistent with relevant regulations; and the flight crew are qualified in accordance with the applicable regulations. This total regulatory framework is not yet in place for unmanned aircraft. The scope of the required regulatory changes to address operations of this class of aircraft, while underway, is extensive and will not be complete for years to come.

At present, unmanned aircraft are unable to present a level of compliance with Air Traffic Management (ATM) communications, navigation and surveillance (CNS) requirements equivalent to that for manned aircraft. For example, from an ATM perspective, there are a considerable number of issues that have yet to be addressed for unmanned aircraft operations, including:

- There have been no ATM integration assessments (including the salient aspects of safety, security and airspace efficiencies).
- Air Traffic flow management policy has not been reviewed to determine if revisions are necessary in order to facilitate unmanned aircraft of various categories.
- The provision of Air Traffic Services (ATS) and procedures adopted during emergencies has not been developed to take into account unique unmanned aircraft failure modes such as command and control link failure, parachute emergency descents, cut-down modes, etc.
- ATS providers will need to be trained to understand the changes that may be brought about by the operating (or performance) characteristics of unmanned aircraft vis-a-vis manned aircraft.
- Since unmanned aircraft ATS communication architectures should not introduce receive/transmit transmission delays, it will be necessary to mitigate the risk of transmission delays being injected into the Air Traffic Control (ATC) operational environment.
- The priority of unmanned aircraft handling - under normal circumstances and in emergencies has not been determined.

The question of whether unmanned aircraft will need to have increased separation minima where an unmanned aircraft is unable to operate at performance levels consistent with ATC clearances has yet to be determined.

CONSIDERATIONS FOR ESTABLISHING UAS RESTRICTED AIRSPACE:

Transport Canada Civil Aviation risk management and decision-making principles must be applied when designating Class F Restricted airspace. Prior to making a determination on designating Class F Restricted airspace for unmanned aircraft operations, considerations will include, but not be limited to the following:

- Precedents that currently exist;
- Restricted airspace does not mitigate all the risk for unmanned aircraft beyond visual line-of-sight operations. The risks for incursions of both manned VFR and IFR traffic into the proposed restricted airspace will have to be mitigated;

DRAFT – SEPT 5, 2011 (DM)

- Within restricted airspace, the risks to people and property on the ground still need to be mitigated if the area is not “sterile”;
- Proximity to towns, international borders and other aerodromes, including seaplane bases;
- Proximity to both civil and military training areas;
- Restricted airspace over water will be good for sterility, but difficult for vehicle recovery. Restricted airspace over water will require coordination with the Coast Guard;
- What activities will actually be conducted within the airspace;
- Existing VFR and IFR traffic patterns and published IFR approaches;
- Classification of the surrounding airspace, including transponder airspace;
- Communication frequencies used in the area, including identifying sources of potential interference;
- Air Traffic Services (ATS) for the proposed and surrounding airspace;
- Flight termination procedures, including lost command and control links;
- Consultation with aviation users affected by the proposed Restricted airspace;
- Conduct of standardized Risk Assessment by applicants for submission to Transport Canada;
- Possible conduct of a Risk Assessment by Transport Canada in conjunction with affected stakeholders;
- Conduct of Environment and Wildlife assessments;
- Conduct of Hazard Identification Risk Analysis (HIRA) by NAV CANADA if there is to be a proposed termination or reduction to the current level of service in and/or around the proposed area.

RECOMMENDATIONS:

There is a legitimate need for unmanned aircraft to become eligible to operate on a routine basis. The following principles must be applied when establishing Class F Restricted airspace for UAS operations:

- (a) Restricted airspace will not be assigned to a specific entity – as it is Canadian airspace and not proprietary. However, a User/Controlling Agency as defined in the DAH must be designated;
- (b) No fees are to be charged for access to the airspace;
- (c) The User/Controlling Agency must either provide scheduling (e.g. range officer) or contract to a service provider (such as NAV CANADA) to provide air traffic separation and other ATS services;
- (d) Special Flight Operation Certificates (SFOCs) will be required to operate unmanned aircraft in Canadian airspace, restricted or otherwise. SFOCs are issued to the unmanned aircraft operator who has custody and control of the

DRAFT – SEPT 5, 2011 (DM)

aircraft. The SFOC applicant must evaluate all risks associated with the proposed operation and provide satisfactory risk mitigation measures in their application;

- (e) Where the aerodrome used for take-offs and landings by the unmanned aircraft are not within the designated Class F Restricted airspace, restricted corridors must be created for transit to the restricted areas. In addition procedures must be in place to ensure no conflict with manned aircraft.
- (f) The designation of Class F Restricted airspace will be done in accordance with the ICAO AIRAC cycle and/or must adhere to ICAO Annex 15, Chapter 5, Article 5.1.1.5 NOTAM requirements;
- (g) Line-of-Sight Operations
 - (i) Dimensions: No more than twenty-five (25) nautical miles (NM) – shape TBD;
 - (ii) Designated Altitude: Surface to 3000 feet
 - (iii) Time of Designation: TBD;
 - (iv) Controlling Agency: TBD;
 - (v) Operating Procedures: No person shall operate an unmanned aircraft over persons or property on the ground.
 - (vi) **Note:** High speed unmanned aircraft (>100 knots and <25 kg) will only be approved for operation if the restricted area is over water. s.21(1)(a)
- (h) Beyond Line-of-Sight Operations
 - (i) Dimensions: No more than [REDACTED] – shape TBD;
 - (ii) Designated Altitude: surface to 12,500 feet
 - (iii) Time of Designation: TBD
 - (iv) Controlling Agency: TBD
 - (v) Operating Procedures: No person shall operate an unmanned aircraft at altitudes greater than 12,500 feet unless prior coordination with the controlling agency and by NOTAM.
 - (vi) **Note:** High speed unmanned aircraft (>100 knots and <25 kg) will only be approved for operation if the restricted area is over the water.
- (i) Transition Corridors to Military Ranges
 - (i) Dimensions: TBD
 - (ii) Designated Altitude: TBD
 - (iii) Time of Designation: TBD
 - (iv) Controlling Agency: TBD
 - (v) Operating Procedures: TBD
 - (vi) **Note:** Ideally, the aerodrome used for take-offs and landings by the unmanned aircraft should be inside the proposed restricted airspace so that corridors do not have to be created to link the aerodrome with the airspace.

DRAFT – SEPT 5, 2011 (DM)

CONCLUSION:

There is a legitimate need for unmanned aircraft to become eligible to operate on a routine basis. However, in order to integrate unmanned aircraft with other airspace users, they must be able to comply with applicable airspace procedures, and carry similar equipment (comparable performance) for flight, navigation and communication, rather than existing Air Traffic Services (ATS) being required to adjust to accommodate unmanned aircraft.

Until such time that unmanned aircraft have common operational, technical and safety systems to ensure a seamless integration in the existing airspace structure, restricted airspace will be required for their continued operations and testing.