



Aviation Safety and Operational Knowledge BC Wildfires Working Group



Intent

- Through additional collaboration we will enhance safety and build confidence in the system.

NOTE *the Working Group will not replace the day of operational requirements of Nav Canada, Transport Canada or the BC Wildfire Services.*

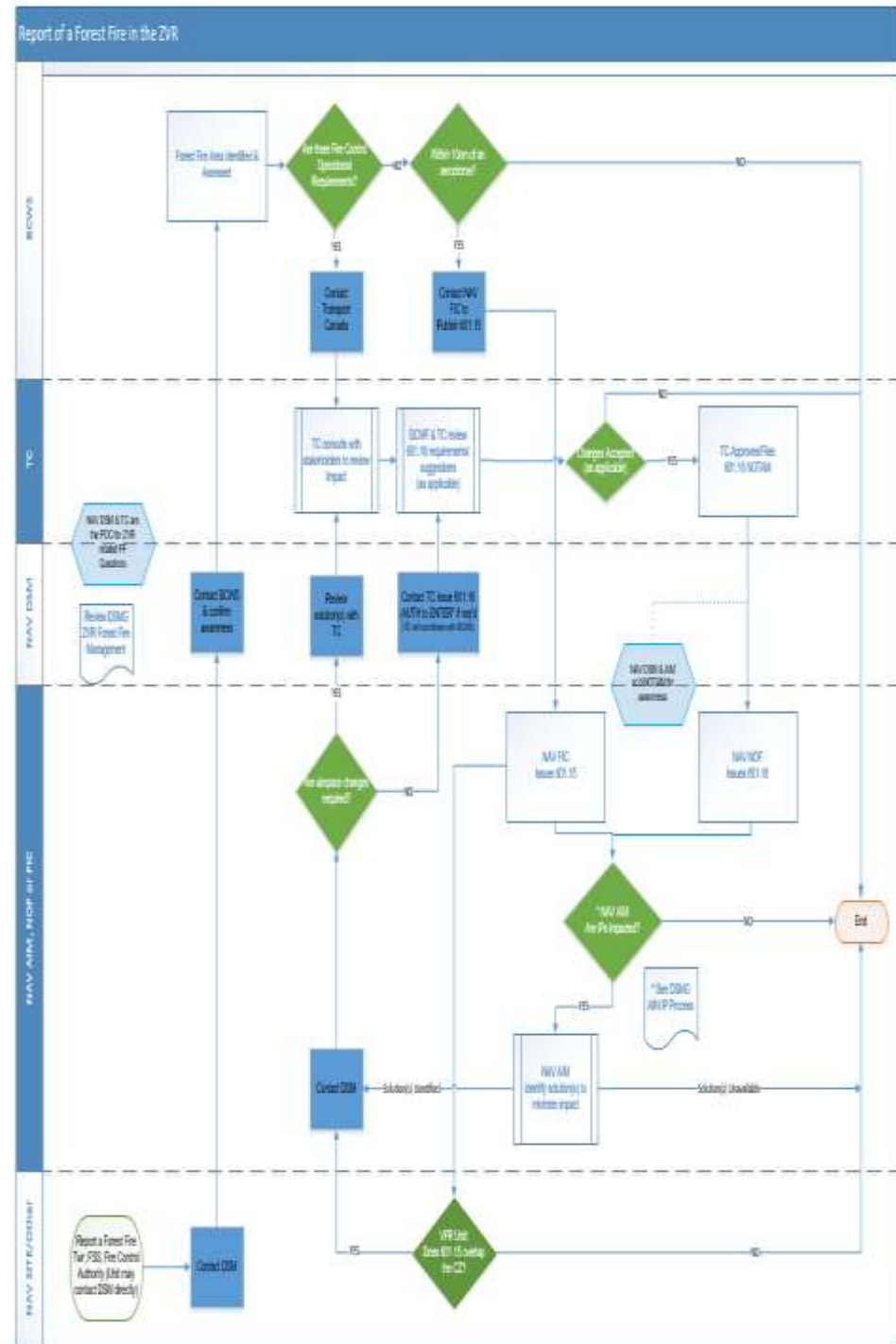


Agenda

- Review
 - Regulatory content.
 - The most recent season.
 - What occurred, what worked (and didn't), communications and processes.
- Collaborate to:
 - Correct any overlapping process deficiencies.
 - Develop messaging (to ensure consistency).
 - Establish a general educational/guidance package that can be delivered annually at Vancouver Air Operations Consultation Meeting (AOCM), and digitally to air operators and local airport authorities.
 - Advocate for change (at all levels) when required.

Collaboration

- Correct any overlapping process deficiencies
 - General Wildfire
 - NOTAM Office
 - Instrument Procedure (IP) NOTAMs
 - Shift Manager
- Develop messaging (to ensure consistency)
 - POC
 - NOTAM clarity
 - Information process
- Update Flow Charts



Collaboration

- Develop messaging (to ensure consistency)

“In some situations, a fire may infringe on a community or aerodrome. It is the fire that impedes operations, not Nav Canada or Transport Canada. The NOTAM merely describes the affected airspace”.

“Unless required for operational safety, do not be a test pilot/controller”.

“Forest fire operations can be detailed in airport specific and/or FIR NOTAMs depending on the forest fire location”.

Collaboration

- Develop messaging (to ensure consistency) – NOTAM CLARITY
NOTAM Office regarding the Vancouver FIR:
 1. Most or all forest fire (FF) NOTAMs originate from TC
 2. Item E will be expanded to include FF names and associated FF No.
 3. References will be anything found on aeronautical maps and shall identify significant airports (commercial operations), as applicable.
 4. TC will forward the drafted area/information for all FF NOTAMs to:
 1. NOTAM Office
 2. Aeronautical Information Management
 3. Vancouver Area Control Duty Shift Manager

Collaboration

- Develop messaging (to ensure consistency) – NOTAM CLARITY

E) PURSUANT TO CANADIAN AVIATION REGULATIONS (CAR) 601.14, 601.15(B) AND 601.16, FOREST FIRE WITHIN AREA BOUNDED BY ... (APRX 20NM WSW KAMLOOPS AD, APRX 16NM SE CACHE CREEK AD). AERIAL FIRE SUPPRESSION IN PROGRESS. EXC WHERE OPR UNDER CAR 601.17, ALL ACFT TO REMAIN CLR.
SR-SS: SFC TO 8000FT AMSL
SS-SR: SFC TO 6000FT AMSL
FOR ARR/DEP AUTH, IFR ACFT CTC VANCOUVER CENTRE
F) SFC G) 8000FT AMSL)

Will be reworded to read...

E) DUE TO THE "xxxx" FOREST FIRE(S) (FF###), EXC WHERE OPR UNDER CAR 601.17, **WHEN IFR PROC ARE AVAIL FOR ARR/DEP AUTH, IFR ACFT CTC VANCOUVER CENTRE...**

Collaboration

- General Educational/Guidance
 - Air Operators & Local Airport Authorities
 - New Site “Flight Operations Resources”

Manage your flight plans online

NAV CANADA's new internet flight planning system makes it possible to file, amend, delay and cancel your flight plans online.

Notices

- [Georeferencing recall clarification](#)
- [Local Area Weather Manuals](#)
- [CFPS Weather Quick Reference Guide](#)
- [Digital Aviation Weather Camera Outages](#)

Links

- | | | |
|----------------------------------|------------------------------------|----------------------------------|
| Canadian Cameras | AIP Supplements | USA Weather |
| Live RVR | Airport Diagrams | USA Cameras |
| A/C | NAV CANADA Notices | Sunrise / Sunset |

News

- [2021-05-10 Drone Flight Planning](#)
- [2020-06-26 November 2020 Update - Informational Video](#)
- [More news ...](#)

Flight Operations Resource Links

Flight Planning | Flight Operations Resource Links

Flight planning information outside NAV CANADA

This page contains links to provincial and federal organization pages containing information that may be useful to pilots, dispatchers and other personnel when performing planning and briefing activities for particular flight operations.

Federal and International Resources

Canada	United States
Space Weather Forecast	Natural Resources Canada
Canadian Wildland Fire Information System	Natural Resources Canada
NOAA Vertical Navigation Service	Federal Aviation Administration
U.S. Weather Map	Fire, Weather & Avalanche Center

Provincial Resources

Alberta	British Columbia	Manitoba
Wildfire Dashboard	Alberta Agriculture and Forestry	Wildfire Information
New Brunswick	Newfoundland	Northwest Territories
Forest Fire Watch	Natural Resources and Energy Development	Fire Hazard Map
Nova Scotia	Ontario	Quebec
Fire Weather Forecast Maps and Indices	Department of Natural Resources and Forestry	Forest Fire Info Map
Saskatchewan	Yukon	Forest Fire Maps

Collaboration

- General Educational/Guidance
 - Air Operators & Local Airport Authorities

(L4887/21 NOTAMN

Q) CZVR/QROLP/IV/NBO/W/000/999/4926N11939W006
A) CZVR B) 2108282039 C) 2108282230EST
E) FOREST FIRE AREA **WITHIN 1NM RADIUS** CENTRED ON 4926N
11939W (APRX 2.6NM SSW PENTICTON AD)
F) SFC G) 3000FT AGL)

NOTE - Q-line does not display on CFPS, so most regional operators and LAA will not see this information.

601.15 - The dimensions are used to protect the area, be it a small spot fire or a larger fire, for tanker and/or helicopter activity. It is quite common for multiple tankers and the birddog aircraft to stack several thousand feet above and possibly away from the fire. As one can imagine the larger tankers (CV580) cannot turn very tightly, thus the larger fire radius.



CNOP 5.4.5

NAV CANADA operational units made aware of a forest fire may issue a NOTAM under the appropriate FIR describing the location and size of the forest fire. In a situation such as this, CAR 601.15 (a) applies: "No person shall operate an aircraft over a forest fire area, or over any area that is located within five nautical miles of a forest fire area, at an altitude of less than 3,000 feet AGL." **Consequently, five nautical miles is added to the area of influence provided and the Upper Limit will be the sum of the approximate terrain elevation and 3000 feet, unless a higher altitude is provided.**

Collaboration

- General Educational/Guidance
 - Air Operators & Local Airport Authorities

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(I5034/21 NOTAMR I4696/21  
A) CYLW B) 2109110018 C) 2109182359  
E) DUE TO FOREST FIRE:  
NADEV TWO DEPARTURE MERYT TRANSITION NOT AUTH  
KATOL TWO DEPARTURE NOT AUTH)
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"Some IPs are managed by an External Design Organization (EDO) and not Nav Canada; therefore, any changes, including cancellation, must be done by the EDO".

1. Can we add that the NOTAM is an EDO? **NO**
2. Is there an easy way users to ID EDO NOTAMs? **NO**

Collaboration

- General Educational/Guidance
 - Package

Forest Fire Information for Aviators
Pacific Region/Vancouver Flight Information Region

Operational Contacts
 Transport Canada Pacific Region Office 604-788-1362
 Nav Canada, Vancouver ACC Duty Shift Manager Office 604-586-4500
 Nav Canada, National Operations Center 613-563-5626



Operational References

- [Canadian Aviation Regulations, Division II — Aircraft Operating Restrictions and Hazards to Aviation Safety](#)
- [Nav Canada, Canadian NOTAM Operating Procedures IAP](#)
- [BC Wildfire Dashboard](#)
- [Nav Canada Daily Strategic Planning Telecommerce](#)

"In some situations, a fire may infringe on a community or aerodrome. It is the fire that impedes operations, not Nav Canada or Transport Canada. The NOTAM merely describes the affected airspace!"

Aeronautics Act 5.1
The Minister may restrict the operation of aircraft over any aviation security or protection of the public.

Canadian Aviation Regulations

601.15	601.16
<ul style="list-style-type: none"> • Default Aircraft Operating Restriction that applies to all forest fires regardless of whether a NOTAM has been issued. • Surface to 3000 ft AGL and 5NM radius. • Within the ZVR, an advisory NOTAM may be issued when the forest fire is within 10NM of an aerodrome, and then a TP308 radar separation buffer (3NM for terminal or 5NM for enroute) is added by Nav Canada (NAV). • When issued it is under the direction of the BC Wildfire Services (BCWS). <p>NOTE all reported forest fires are depicted on the BC Wildfires dashboard.</p>	<ul style="list-style-type: none"> • NOTAM for Forest Restrictions – is Canada (TC) • Where the forest in an advisory has negative impact on operations, TC, NAV and BCWS restrict by is pursuant to CA • Altitudes (ASL) of coordinates) NOTAM, and the separation buffer • Once the NOTAM evaluates all relevant information to determine impact on an Instrument A (IAP) related "..." NOTAM, as applicable • These will now be Forest Fire num

"Forest fire operations can be detailed in airport specific location/impact".

Forest Fire Information for Aviators
Pacific Region/Vancouver Flight Information Region

Canadian NOTAM Operational Procedures
Forest fires and restrictions: will include a description of the area restricted. If the forest fire is beyond 5 NM from any aerodrome, the related NOTAM shall be issued under the appropriate FIR(s) with a reference in the text to the closest aerodrome.

Collective Partnership
Memorandum of Understanding (MOU) – Airspace Management During Forest Fire Operations, serves in the interest of aviation safety and operational efficiency and outlines the agreed upon process for airspace management during forest fire operations. The MOU does not impose a legal obligation on any of the named parties; however, it articulates the partnership between TC, NAV and the BCWS, and supports efforts to work collaboratively and cooperatively to minimize the impact on the aviation system while ensuring the safety of firefighting operations.

NOTE When a Forest Fire NOTAM impacts instrument procedure within CONTROLLED AIRSPACE, as applicable, the ACC Shift Manager can coordinate with the site manager, Transport Canada, and forest fire service to amend, when able, the forest fire dimensions and mitigate impacts.

Process

1. Forest Fire is reported to the accountable wildfire service.
2. BCWS dispatches resources to identify location and determine required fire fighting resources.
3. BCWS contacts TC to provide location and operational requirements.
4. TC evaluates, drafts, and submits required NOTAM (601.15, 601.16 or 601.17) to the:
 - a. NAV's NOTAM Office for processing; and
 - b. NAV ACC Shift Manager office for awareness.
5. NAV NOTAM Office:
 - a. publishes the NOTAM, and,
 - b. advises NAV Aeronautical Information Management (AIM) office of related forest fire NOTAM.
6. To ensure TP308 (Criteria for the Development of Instrument Procedures) compliance, Nav Canada AIM evaluates all instrument procedures (IPs) in the area and provides the ACC Shift Manager with an advance review of the assessed impact.

NOTE There are a limited number of AIM specialists that monitor ALL activity in ZVR and ZEG FIRs from forest fires, construction projects, Land Use, declared distances, all quality assurance of new designs, NOTAMs, etc. and forest fire situations are at the top of the list. After 1600 EST, the on-call designer may not be as familiar with the ZVR situation but can respond to any emergency as required.

7. The ACC Shift Manager, working with NAV AIM:
 - a. reviews the impact for possible additional relief, including (but not limited to):
 - area dimension changes
 - simple IP NOTAM-able changes (MAP, speeds, etc.)
 - use of sunrise to sunset (SR-SS) and SS-SR
 - drone night operations
 - b. submits request(s) to TC for coordination with BCWS.
8. If any relief can be considered, steps 4 thru 7 are repeated until the applicable IP (Not Authorized) NOTAM(s) are published.

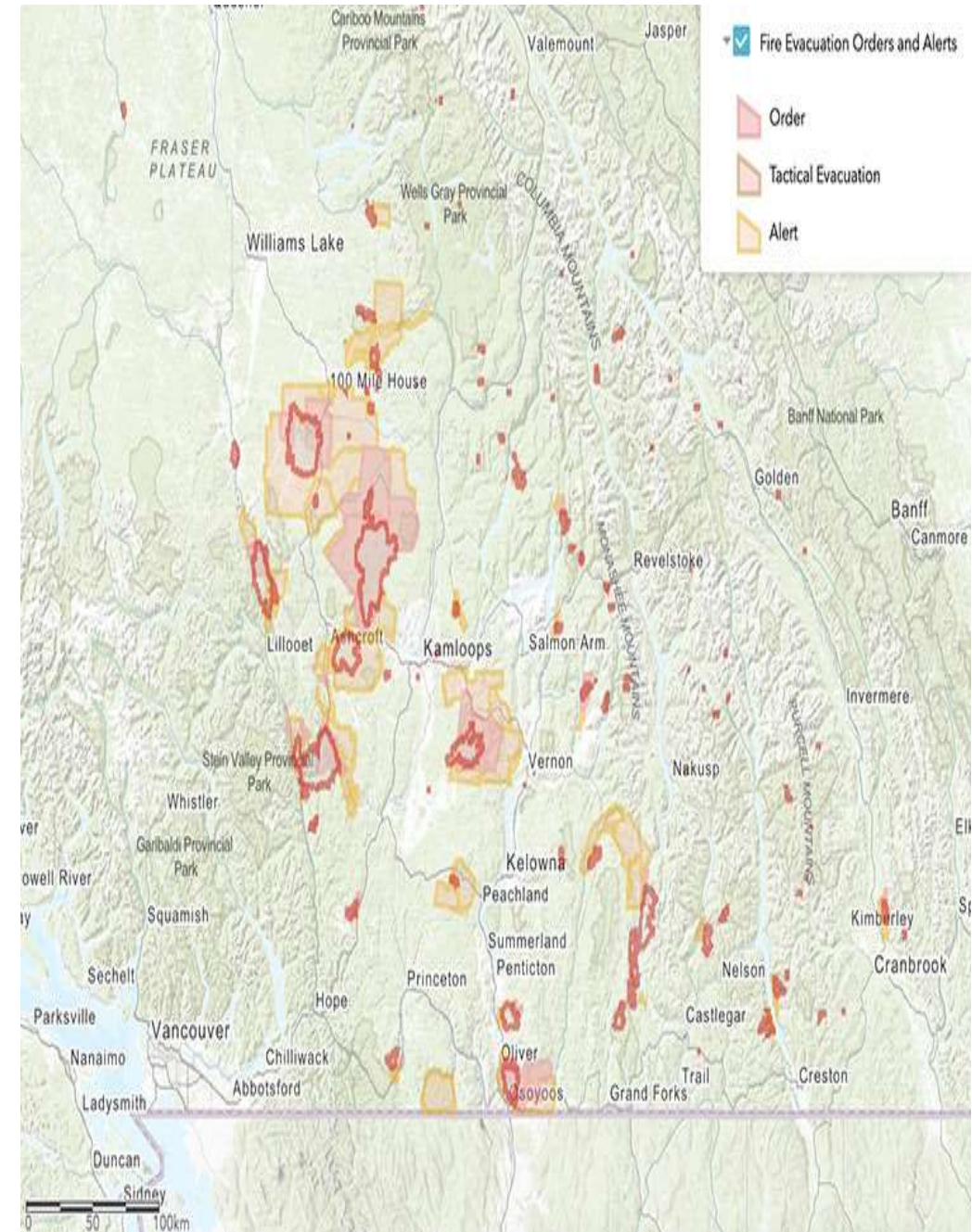
NOTES

- a. The many steps of the process are repeated daily, and whenever BCWS has updates to the wildfire area or the operational requirements.
- b. Some IPs are managed by External Design Organizations (EDO) and not Nav Canada; therefore, any changes, including cancellation, must be completed by the EDO. Unfortunately, there is no indicator in an IP NOTAM to identify which are EDO.

"Unless required for operational safety, do not be a test pilot/controller"

Questions & Answers

- FAQs
 - 601.15 vs 601.16 or 601.17
 - 3000'
 - Birddog
 - No NOTAM
 - 10nm from an aerodrome
 - NOTAMs
 - Timelines - workday hours vs evenings and weekends
 - Graphical representations



Final Thoughts

Through continual collaboration, we will educate, enhance safety and build confidence in the system.

- [BC Wildfire Dashboard \(arcgis.com\)](https://arcgis.com)
- [@BCGovFireInfo / Twitter](https://twitter.com/BCGovFireInfo)
- [CFPS - Welcome to CFPS \(navcanada.ca\)](https://navcanada.ca)

Thank you



Transports
Canada

Transport
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