Coastal Fire Centre

ISSUE 9 | 28.08.2020

BRITISH Olumbia

3C Wildfire Service

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CURRENT STATISTICS

Fires to-date: 111 Hectares burned: 857 Human-caused: 66 Lightning-caused: 45

BANS AND PROHIBITIONS

Campfire: No Ban Category 2: In Effect Category 3: In Effect Forest Use Restrictions: No Ban <u>Prohibitions section of bcwildfire.ca for full</u> details.

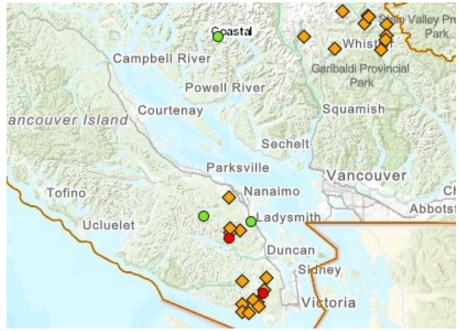
Second Band of Lightning Strikes

On August 16, 2020, a second lightning band ran through the Coastal Fire Centre. The lightning storm was centred over southern Vancouver Island then worked its way north and also dropped strikes in the Pemberton Zone.

In its wake the storm ignited 24 wildfires in the first day. The number of lighting fires in the Pemberton area resulted in the creation of the Pemberton Complex, which developed a larger management group to support the crews working on those fires.



Today, only three of these lightning fires are still active on southern Vancouver Island, and six near Pemberton. These remaining fires are in steep, rugged terrain, that pose problems for crews working on the fires.



From the public site, www.bcwildfire.ca on August 18, 2020.

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COASTAL Fire Centre

Coastal Fire Centre Aviation Team

This year, the Coastal Fire Centre Aviation Team was challenged to deliver the rigorous training required to certify and recertify our staff in the practice of Hover Exiting. This skill is a vital part of getting our crews safely to fires in remote, rugged Coastal terrain, when they have to exit the aircraft without the helicopter setting down on the ground. The COVID pandemic initially impacted how this training was delivered while maintaining safe distances and practices, but once correct protocols for our staff were identified and understood, the team was able to deliver this training to all staff that required it.

The recent lightning storms have kept the Aviation team busy. Coastal Aviation staff have procured aircraft to support crews by initiating detection patrols, bucketing fires, establishing remote site accesses to fires, slinging or long lining gear into fires, aerial reconnaissance, and scanning flights for hot spots.

Skids Down

"Skids Down" is a term that all people in the aviation world understand. The term is used to describe the time of day when a helicopter *must* have its skids on the ground (i.e. land for the remainder of the day).

Helicopters can not normally operate without risk after dark and that risk does not outweigh any potential benefit from flying at night. Remember that fire behaviour generally drops off as temperatures drop at night, which generally makes fire activity lower through the night hours.

The BCWS 2020 Pilot Information Guide outlines this, and other expectations, of helicopter pilots that contract to the BCWS. (link)

Night Flying Goggles

During the evenings of July 6 and 7, 2020, the BC Wildfire Service conducted successful tests of helitankers using night vision goggle (NVG) technology near Penticton, which could potentially assist with future firefighting operations.

A decision was made prior to the first flight to have the helitanker (a helicopter equipped with a water tank) make drops on a small, contained campfire, since it would yield more meaningful results and allow the team to better evaluate the technology's effectiveness.

These trials will continue to refine operational procedures for NVG technology. The BC Wildfire Service will continue to look for opportunities to work with other vendors and test NVG technology for fire detection and other wildfire-related activities.



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BC Wildfire Service Aviation Overview

The BC Wildfire Service employs a variety of both fixed-wing and rotary-wing aircraft to aid in wildfire suppression. Fixed-wing aircraft include airtankers, bird dogs, jumpships, and patrol planes. Rotary-wing aircraft are our helicopter fleet. Although airtankers and helicopters are a highly visible part of wildfire response, it is important to remember that they do not put out wildfires on their own, rather, they provide critical support to our crews on the ground.

Depending on fire behaviour, location and weather conditions, the BC Wildfire Service may deploy fixed-wing and/or rotary-wing aircraft (i.e. helicopters) to assist with fire containment and suppression. The Province's contracted aircraft fleet is repositioned as needed during the fire season to be ready for anticipated fire starts in high-risk areas.

It is important to note that there is a difference between fixed and rotary-wing aircrafts. A fixed-wing aircraft refers to standard planes that have their wings affixed to provide lift, while rotary-wing aircraft actually have rotating wings to provide a unique lift capability that enables them to fly horizontally and hover in place. The differences are explained below.

Airtankers

- Airtankers usually fly in groups of up to four aircraft with a combined capacity of up to 16,000 litres of fire retardant, or over 11,000 litres for a single, heavier aircraft. Each group is led by a "bird dog" plane that directs the airtankers to the most effective and safe drop locations.
- There are two types of firefighting airtankers: land-based airtankers and water-skimmer airtankers. B.C. uses both types. Over the course of an average wildfire season, the B.C. government's contracted airtankers conduct about 560 missions throughout the province. At full operational readiness, the BC Wildfire Service operates a fleet of 20 airtankers and eight bird dog aircraft (in addition to its contracted helicopter fleet).
- Amphibious airtankers are able to "skim" water from lakes and rivers. The BC Wildfire Service's fleet includes 10 Air Tractor AT-802F Fire Boss amphibious airtankers. They can drop either water, foam or fire retardant, and each is capable of skimming up to 3,025 litres of water in 15 seconds from over 1,700 bodies of water in B.C.







COASTAL Fire Centre

BC Wildfire Service Aviation Cont.

Due to the province's vast and varied geography, the BCWS relies heavily on rotary-wing aircraft to perform a wide variety of tasks. The tasks include transporting firefighting crews, fire line personnel and equipment during the initial attack and sustained action phases of wildfire response. Helicopters are also used for infrared scanning, mapping and/or observation of fires, and for deploying crews who can rappel down to the site of a wildfire when there is limited or no alternative means of access. Helicopters can also be used to drop fire retardant, foam or water on a fire. The functions of a helicopter are highly dependent on the machine's ability to lift weight, which is why we categorize rotary-wing aircraft into four types based on their lift capabilities:

Light

These helicopters have limited lift capabilities, especially in hot weather or at high altitudes. These machines are typically used for infrared scanning in order to locate hot spots, and aerial reconnaissance missions.

Intermediate

These helicopters are considered BCWS's bread and butter. These are typically used to support initial attack crews (IA), as they are capable of flying a typical three-person IA crew and their equipment to the fire, as well as assisting suppression efforts with bucketing water. Additionally, we can use these machines for aerial ignition operations or any other function that a light-type helicopter could perform.

Medium

This machine is commonly used on larger fires, where bucketing operations are relied upon. The internal seating capacity of these machines also allows for a larger movement of crews and gear, and the greater lift capacity allows for even bigger water buckets and greater water delivery on a fire.

PARATTACK OPERATIONS

BCWS contracts out two specialized aircraft that serve as jumpships during

the fire season. These planes are capable of responding to almost every area of the province in under 2 hours. Jumpships are typically used to deploy parattack crews to action fires in the most remote regions of the province, but may also be utilized for fire detection, assisting with medical

evacuations, or resupplying crews with gear.



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Eyes in the Sky

Aircraft are a versatile and vital part of BC Wildfire Service operations. Upon arriving on site of an incident, a crew may request aviation support. Additionally, Coordination Centre Operations staff may pre-emptively deploy aviation resources as crews travel to the site. This support could be in the form of fixed-wing or rotary-wing aircraft. Fixed-wing refers to bird dogs, air tankers, and other planes, whereas helicopters are classified as rotary-wing aircraft. Helicopters, specifically, support crews and assist suppression efforts through diverse means.

Aerial support provides a different perspective on an incident, which can help develop a plan to fight a wildfire. Crews look to aviation because sometimes the fire behaviour displayed is too aggressive or quick-moving for an accurate and safe assessment on the ground. For this reason, a reconnaissance flight may be utilized. A reconnaissance flight is when an aircraft flies overhead of an active wildfire to better analyze its characteristics. They can provide the crew a better overview of the size of an incident, what fuel types are involved, and where the nearest water source is. Their overview can also assist crews in assessing accessibility and providing directions for both crews and additional resources such as heavy equipment; as well, they can alert crews if there are values at risk or hazards within the vicinity of a wildfire.

To request aviation support, a crew leader will call into dispatch after assessing a fire and relay the resource and/or equipment requests. The fire centre will then dispatch the available aircraft and advise both parties of the appropriate simplex radio channel for communication. Once the aircraft is overhead and has established contact with the crew, it acts as the "eyes in the sky," assisting the crew in a variety of ways.

Helicopters and fixed wing aircraft are also used to directly fight a wildfire. Helicopters have the unique ability to fly low and close to a fire to help with suppression efforts. They may be equipped with belly tanks or buckets, which carry water to be dropped on a fire, dousing hotspots. Their buckets can also deliver water to crews' stilwells. Stilwells are small portable water bladders that crews set up a water pump to in order help their suppression efforts. Helicopters can fight fire with fire in the form of controlled burning operations. This is carried out by attaching a drip torch to the end of a longline, which hangs from a helicopter. The longline can also be used to transport equipment and gear for crews and even crew members themselves!

On top of all of these functions, helicopters can monitor a fire and help ensure that all fireline activity is operating safely. The range of capabilities and use of aircraft is of incredible value to our organization.



Coastal Fire Centre

Fire Weather Forecast

ISSUED: 12:00 PDT Friday, August 28, 2020

SYNOPSIS (Today/Tomorrow): An upper trough moving through the Fire Centre today slowly departs tomorrow, pushing a front southward through the Fire Centre today and into tomorrow afternoon. The frontal boundary remains more organized over northern regions of the Fire Centre bringing cloud and shower activity, however weakens as it moves southward this afternoon with sunnier, warmer and drier conditions expected to remain for the south. It does manage to find some organization again into tomorrow morning over the south bringing some occasional cloud and possibly a light shower before departing in the afternoon. Winds associated with the front will not be affected by it weakening, however, with moderate and gusty winds already being observed over northern areas of the Fire Centre and expected to spread southward over the coming hours. While inflows remain, winds near ridgetops and over open water are expected to be southwesterly initially, changing over to west to northwesterly as the front moves southward, with the directional shift occurring latest in the day toward evening over southern areas.

Some isolated lightning is expected to develop this afternoon over Haida Gwaii, with a risk of some lightning over higher terrain in Fraser and Pemberton Zones tomorrow afternoon.

OUTLOOK (Sunday - Tuesday): Sunday is a bit of a break in the pattern initially, however another system quickly slides down the coast by later in the day and lingers into early Monday. Best coverage of stations with precipitation amounts is expected again over northern regions of the Fire Centre, with decreasing potential moving southward and southern areas of the island likely seeing nothing at all. The trend to a marginally cooler regime with humidity bumping upward seems valid, however, through all areas. Monday sees temperatures bump back up a few degrees again with general clearing through the Fire Centre as a weak upper ridge anchored off the Pacific moves over the region, although the storm track stays near northern borders so more cloud and shower activity is possible there. A flatter west to northwesterly flow aloft then continues these general conditions into Tuesday, with warmer and drier conditions over the south and cooler and wetter conditions near northern boundaries.

CONFIDENCE/DISCUSSION: Good to fair confidence in the shorter timeframe. Winds are again the wildcard, with challenges of directional shear with elevation, elevated overnight winds, and patchy bits of gradient creating issues. In the longer timeframe things are starting to settled, particularly considering the system into Monday morning, so confidence is trending upward there.

Coastal News

There are currently four active fires on southern tip of Vancouver Island and one north of Gold River—all are Under Control. On the mainland there are six active fires near Pemberton, two Under Control, three Out of Control, and one Being Held. There is an Out of Control fire east of Bute Inlet in rugged terrain that we are monitoring and this fire does not pose a threat to homes or structures at this time. There is a small spot sized fire near Alouette Lake north of Mission which is being held—this human caused fire is burning in a slash pile and has had little spread beyond the pile itself.

Campfires are still permitted within the Coastal Fire Centre's jurisdictional area, but people are encouraged to check with their local government to make sure there are no local open burning bylaws that may apply. A reminder that a campfire is a half a metre by a half a metre or smaller, is monitored at all times, that people must have a way to put it out like water and hand tools, and most importantly the fire must be put out cold to the touch prior to leaving the area for any amount of time.

Contact Information

Report a Wildfire: *5555 on a cell or 1 800 663-5555 Wildfire Information Line: 1 888 3FOREST Burn Registration Number: 1 888 797-1717 Information Officer Phone Number: Add info Information Officer Email: Add info