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 **- Missing Aircraft Report Form -**
Please complete this report form as completely as possible then email it back to **sartechnology@telus.net**.

**General description of the missing aircraft incident:***USAF C-54 aircraft 2469 disappeared flying the Amber no. 2 airway from Elmendorf AK to Great Falls, MT. Checked in at Snag Yukon and failed to check in at next station, Aishihik, Yukon. Had a crew of 8 and 36 passengers on board.*

**Aircraft Departure Information:
Aircraft Operator:** *Northern Flyer* **Flight Number:** *6W703***Transponder ID:** *7421***Departure Airport/Location Name:** *Elmendorf AB, Anchorage AK*
**Latitude:** *61 deg 15 min 9.22 sec N*
**Longitude:** *149 deg 48 min 29.97 sec W*
**Date/Time left Departure Location:** *2116Z hrs Jan 30th 2017* **Total Number of Crew on Board during incident:** *3* **Total Number of Passengers on Board during incident:** *12*

 **Aircraft Destination Location:**
**Destination Airport/Location Name:** *Great Falls AFB, MT*
**Latitude:** *47 deg 30 min 17.00 sec N*
**Longitude:** *111 deg 11 min 14.00 sec W*
**Planned Arrival Date/Time at Destination Location:** *0546Z hrs Jan 31st 2017*

**Aircraft Actual Last Known Point (LKP):
e.g. visual sighting, radio tower comms, cell-phone ping, drop from radar, Flight Tracker, along the flight-path.
Aircraft Latitude: *62 deg 21 min 47.03 sec N*** **Aircraft Longitude: *140 deg 20 min 58.23 sec W*** **Date/Time at Last Known Point:** *2309Z hrs Jan 30 2016*
**Altitude at Last Known Point: *5500 ft*
Direction of Travel at Last Known Point: *230 Deg T*
Airspeed at Last Known Point: *104 knots***

**Aircraft’s Next Expected Point (NEP):
The next contact location e.g. radio tower or aerodrome, that was expected along the flight-path.
 NEP Latitude: *62 deg 57 min 32.18 sec N*** **NEP Longitude: *140 deg 45 min 35.40sec W*** **Date/Time Predicted at Next Expected Point:** *2344Z hrs Jan 30 2016*
**Aircraft Altitude Predicted at Next Expected Point: *5500 ft*
Aircraft Direction of Travel Predicted at Next Expected Point: *230 Deg T*
Airspeed Predicted at Next Expected Point: *104 knots***

**Aircraft’s Last Probable Point (LPP): (for each scenario) - from which crash locations will be calculated (important).
 Aircraft Latitude:** *Same as LKP* **Aircraft Longitude:** *Same as LKP*
**Predicted Date/Time at Last Probable/Planning Point:** Same as LKP **Predicted Altitude at Last Probable Point: *6500 ft*
Predicted Direction of Travel at Last Probable Point: *210 Deg T*
Predicted Airspeed at Last Probable Point: *120 knots*

Weather Conditions at Aircraft Last Probable Point (LPP):
Wind Speed, Knots  (e.g. 15 Knots): *61 knots***
**Wind Direction (From), Deg True:**  ***295 Deg T*
Cloud Ceiling (ft):** *Scattered over entire route except in Whitehorse where it was 7500 ft overcast, visibility 30 miles.* **Storm Front Location from LPP (if any):** N/A
**Please include any METARS reports for the departure airport, destination airport and possible incident locations.

Aircraft information:
 Aircraft Make / Model / Version #**: *Cessna 172 G*
 **Aircraft Model Year:** *2010* **Aircraft Number of Engines:** *1* **Aircraft Registration Number:** *N973KM* **Aircraft Cruise Airspeed:** *165 knots*
 **Aircraft Cruise Altitude:** *5500 ft*
 **Aircraft Equipment Problems:** *Faulty pitot tube sensor replaced two months ago.* **Additional Scenario information

Any additional information that may help improve the scenario planning:***Aircraft was not overloaded. “Aircraft probably entered instrument conditions after leaving Snag.” “Information from CAA indicates that C-54 reported.” Heavy icing past Snag. 13 hours of fuel on board.* **Aircraft Flying VFR or IFR at time of incident:** *VFR***Aircraft Flying in Daylight, Twilight or Darkness at time of incident:** *Daylight* **Aircraft Flight Scenario (describe one scenario for each crash map to be created)

 Scenario Type -  Under Power in Level Flight:
Scenario Description:** *Under power but at low altitude below mountain tops, below cloud ceiling. Possibly descending (one engine had failed before the flight began). Heavy icing had been reported and cloud ceiling (7500ft) at Whitehorse. A multi-engine plane was reported 2000ft above Mile 936 Alaska Highway (between Haines Junction and Whitehorse) at 3:15pm 26 Jan 2017, indicating aircraft may have been flying at low altitude towards Whitehorse.* **Scenario Type  -  Under Power and Climbing:**  Rate of Climb,  ft/minute (e.g. 700 feet/minute): *700 ft/minute*
 **Scenario Description:** *Describe the scenario here.* **Scenario Type  -  Under Power and Descending:** Rate of Climb,  ft/minute (e.g. 300 feet/minute): *300 ft/minute*
 **Scenario Description:** *Describe the scenario here.* **Scenario Type -  Un-Powered, in Gliding Descent:
 Scenario Description:** *Describe the scenario here.***Scenario Type -  Un-Powered, in Falling Descent:
 Scenario Description:** *Describe the scenario here.*



 **Recommended Initial Search-Support Strategies**

**1.
Use ‘POI Commander’ to perform a Communications Search
 - of all Aerodromes within 50 NM either side of the entire flight path.** <http://www.sartechnology.ca/poicommander/> **- Submit this Communication Search Report and KML file to the SAR Response Organization.**

**
2.
Create an Aircraft Crash Location Map KML file
- using the initial information contained within this Missing Aircraft Report Form.** <http://sartechnology.ca/sartechnology/MissingAircraft_ReportForm.docx>
<http://sartechnology.ca/sartechnology/MissingAircraft_ReportForm.docx><http://sartechnology.ca/sartechnology/ST_AircraftCrashMap.htm> **- Submit this Aircraft Crash Location Map KML file to the SAR Response Organization.**

**3.
Perform a Missing-Aircraft Image Recognition Search** <http://www.sartechnology.ca/imagerecognition-flightplans/> **- Using the following Image-Recognition Flight Plan:**  **- Submit this Image-Recognition Search Flight Plan to the SAR Response Organization.**

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| **Image Recognition Flight Plan** | **Search-Aircraft Flight Plan** | **Search-Aircraft Flight Plan** |
| --- | --- | --- |
| **Aircraft Flight Plan Details** | **- For Missing Aircraft & Helicopters** | **- For Missing Aircraft & Helicopters** |
| **for Search Aircraft** | **- In Open or Mixed Terrain** | **- In Forest with some Open Canopy** |
| http://www.sartechnology.ca/wp-content/uploads/2018/01/Aircraft_FourPropellerTransparent_295x151.png | http://www.sartechnology.ca/wp-content/uploads/2018/11/Aircraft_Crashed114_CommUse_366x271.jpg | **http://www.sartechnology.ca/wp-content/uploads/2018/11/Aircraft_Crashed470_Forest_366x271.png** |
| **Aircraft Altitude Above Ground Level:** | **- In Openor Mixed Terrain500 Ft Above Ground level** | **- In Forestwith some Open Canopy520 Ft Above Ground level** |
| **Aircraft Ground Search Speed:** | **139 km/hr (75 Knots)** | **139 km/hr (75 Knots)** |
| **Aircraft Track Spacing:**  | **1,127 meters (3,697 Feet) Spacing** | **689 meters (2,620 Feet) Spacing** |
| **Camera Orientation:** | http://www.sartechnology.ca/wp-content/uploads/2018/11/CameraIcons2Blue_Side-ViewForwardFOVs_61x75.png**Left & Right Cameras Facing Forward** | http://www.sartechnology.ca/wp-content/uploads/2018/11/CameraIcons2Blue_Side-ViewDownFOVs_93x75.png**Left & Right Cameras Facing Down** |
| **Camera Default Mode:**  | **Time-Lapse Photo GPS: On** | **Time-Lapse Photo GPS: On** |
| **Camera Single-Shot Time Lapse Interval:** | **5 Seconds Interval** | **5 Seconds Interval** |
| Camera Total Horizontal Field of View: 135 Deg | - | - |
| Megapixels: 12 MB. Format: 16x9 Wide, Zoom : 0% | **- Open/Mixed Terrain Area Coverage -** | **- Forest Terrain Area Coverage -** |
| EV Comp: On -0.5, ISO 100 min 1600 max | **139 Km Total Track Length per Hour** | **139 Km Total Track Length per Hour** |
| Color: GoPro. White Balance: Auto | **156.61 Sq Km Area Coverage per Hour** | **95.73 Sq Km Area Coverage per Hour** |
| Sharpness: High. High Dynamic Range: On | **9 Images per Sq. Km** | **15 Images per Sq. Km** |
| Gimbal: GoPro Karma Grip or EVO-SSPan-Follow Mode | **1,440 images per Hour** | **1,440 images per Hour** |