

## **Informational Handout:**

# King County International Airport-Boeing Field Seattle, Washington

Published Visual Flight Rules (VFR) routes for arrivals and departures.

## Project Background

The Federal Aviation Administration (FAA) cancelled two existing VFR routes for aircraft landing and departing King County International Airport-Boeing Field (KBFI) and replaced them with newly defined routes (retaining some of the existing names). The term "routes" can best be described in this instance as a "set of pre-coordinated instructions" that is given to VFR pilots. The routes enhance safety by increasing separation between arrival and departure flows into KBFI, Seattle-Tacoma International Airport (KSEA), and Renton Municipal Airport (KRNT).

## Purpose of Changes

There have been Traffic Alert and Collision Avoidance System (TCAS) events involving VFR aircraft arriving and departing KBFI, and these routes are intended to reduce TCAS events and enhance safety. TCAS monitors the airspace around an aircraft for other aircraft equipped with proper equipment, independent of air traffic control, and warns pilots of the presence of other properly equipped aircraft in the immediate area.

# **Project Description**

The project results in a change to past operating procedures by publishing several existing routes for VFR aircraft to use when arriving and departing from either runway configuration at KBFI. KBFI Airport Traffic Control Tower (BFI ATCT) now has the ability to assign published routes rather than issuing tailored instructions. The new VFR routes provide better predictability, enhance safety, and improve the segregation of aircraft arriving and departing KBFI.

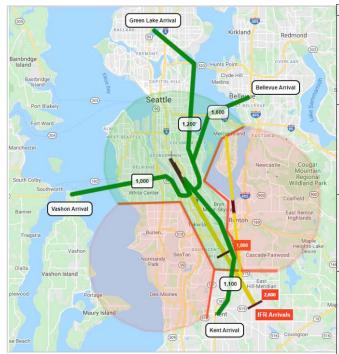
# What Changed

The new VFR routes follow pre-existing air traffic flight tracks that are assigned by BFI ATCT and no new areas will experience new air traffic overflights. Although the procedure lines appear defined, VFR is less predictable and variable based on winds, temperature, cloud cover, and pilot discretion. Therefore, the new VFR arrival and departure routes do not introduce air traffic to any new areas. VFR routes are defined as general flight paths—not defined as a specific course—for use by pilots in planning flights into, out of, through, and/or near complex terminal airspace. Pilots now have more predictable options for VFR arrivals and departures at KBFI, and BFI ATCT controllers are able to assign routes by name rather than describe them in detail. In a Runway (RWY) 32 configuration, pilots and controllers have four options for VFR departures, and five options for VFR arrivals. In a RWY 14 configuration, pilots and controllers have five options for both VFR arrivals and VFR departures. See the following graphical descriptions for details.

## **Publication**

The KBFI VFR routes were published on the Seattle TAC/Fly Chart April 22, 2021 with implementation May 15, 2021

# Arrivals in a RWY 32 Configuration



#### North Arrivals Description (Estimated daily operations)

#### Vashon Arrival: (15 Aircraft)

- Contact KBFI Tower 120.6 over North Vashon Island.
- Fly eastbound (approximate ground track 080°) toward midfield Boeing airport.
- After crossing the shoreline, descend to 1,000 feet or below.
- Over the Duwamish River enter left downwind, maintain 800 feet

#### Green Lake Arrival: (15 Aircraft)

- Contact KBFI Tower 118.3 over Green Lake.
- Fly southeast toward 520 floating bridge and western Lake Washington shoreline.
- From 520 bridge fly via the shoreline until I-90 bridge (crossing I-90 bridge at 1,200 feet)
- Enter right downwind

#### Bellevue Arrival: (20 Aircraft)

- Contact KBFI Tower 118.3 east of downtown Bellevue
- Fly toward where I-90 bridge meets Mercer Island east of Mt. Baker tunnel.
- Cross I-90 bridge at 1,600 feet, then fly direct to midfield right downwind.

## Kent Arrival: (20 Aircraft)

- Contact KBFI Tower 118.3 over Kent.
- Fly northbound along SR-167 until abeam Valley Medical Center/IKEA at 1,100 feet.
- Fly over the east side of Renton Concrete Recyclers to make a straight-in approach.

# Departures in a RWY 32 Configuration



## North Departures Description (Estimated daily operations)

#### Blake Departure: (10 Aircraft)

- Depart runway and when able, turn westbound toward Blake Island remaining at or below 1,700 feet.
- Continue toward Blake Island and cross the shoreline at or below 1,900 feet.

#### Alki Departure: (5 Aircraft)

- Depart runway and as soon as able, turn northwest bound to Alki Beach (approximate ground track 300°).
- Cross over Alki Beach at or below 1,500 feet.

#### Green Lake Departure: (15 Aircraft)

- Depart runway and follow I-5 Northbound at 1,600 feet remaining east of downtown Seattle.
- Once abeam Lake Union, turn slightly left to pass just west of Green Lake, then on course.

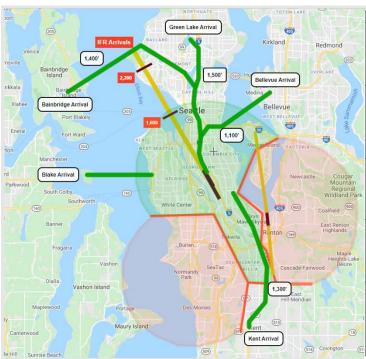
#### Bellevue Departure: (20 Aircraft)

- Depart runway, and when able, turn northeast bound to overfly Mt.
  Baker (I-90 bridge and western shoreline of Lake Washington) at 1,600 feet.
- Once north of I-90 bridge, fly toward the north side of downtown Bellevue, then on course.

#### Rainier Beach Transition: (20 Aircraft)

- Depart runway, and when able, make a right downwind departure to overfly Rainier Beach at 1.500 feet.
- Expect frequency change from KBFI tower to KRNT tower prior to Rainier Beach.
- At Rainier Beach, continue climb to 1,900 feet DIRECT to KRNT airport. Continue present heading to SR-169 toward Cedar Hills Landfill until outside of KRNT Class D airspace, then on course.

# Arrivals in a RWY 14 Configuration



#### South Arrivals Description (Estimated daily operations)

#### Blake Arrival: (12 Aircraft)

- Contact KBFI Tower 120.6 over Blake Island.
- · Fly eastbound to pass north end of Lincoln Park.
- Report over Lincoln Park and expect sequence/landing instructions from KBFI Tower.

#### Bainbridge Arrival: (7 Aircraft)

- · Contact KBFI Tower 120.6 over Bainbridge Island
- Maintain at or below 1,400 feet and fly northeast bound to West Point.
- Fly east bound and join the ship canal to Lake Union.
- Join I-5 southbound until turning a one-mile final.

#### Green Lake Arrival: (12 Aircraft)

- Contact KBFI Tower 118.3 over Green Lake, fly via I-5 southbound.
- Maintain 1,500 feet abeam 520 floating bridge.
- Continue I-5 southbound until turning a one-mile final.

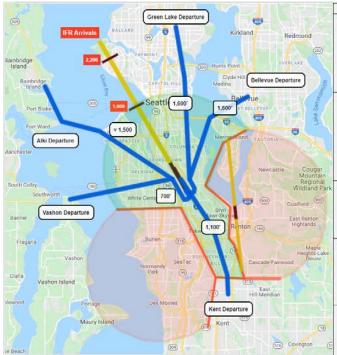
#### Bellevue Arrival: (15 Aircraft)

- · Contact KBFI Tower north of downtown Bellevue.
- Fly toward Mt. Baker (I-90 bridge meets western shoreline).
- Cross Mt. Baker at 1,100 feet, enter left base.

#### Kent Arrival: (15 Aircraft)

- Contact KBFI Tower 118.3 over Kent.
- Fly northbound along SR-167 until abeam Valley Medical Center/IKEA at 1,300 feet.
- Fly over the east side of Renton Concrete Recyclers to enter left downwind.

# Departures in a RWY 14 Configuration



#### South Departures Description (Estimated daily operations)

## Vashon Departure: (12 Aircraft)

- . Depart full length RWY 14R straight out until reaching 700 feet.
- Make a continuous right turn to the downwind at or inside of the Duwamish river while maintaining 700 feet.
- After passing the white Boeing tent hangers, make a left turn westbound toward the north tip of Vashon Island (remaining south of Lincoln Park) and below the Seattle Class Bravo airspace.

#### Alki Departure: (10 Aircraft)

- Depart full length, and when able, make a continuous right turn to the downwind at or inside the Duwamish river while maintaining 700 feet.
- After passing the control tower, make a slight left turn toward Alki Point lighthouse (approximate ground track 300°) maintain at or below 1,500
- Over the lighthouse, proceed to Restoration Point, then toward Bainbridge Island, then on course.

#### Green Lake Departure: (10 Aircraft)

- Depart runway, make a left downwind departure to overfly Mt. Baker (I-90 bridge and the western shoreline) at 1,600 feet
- Continue north to cross over University of Washington. Remain EAST of I-5 until passing Green Lake, then on course.

## Bellevue Departure: (15 Aircraft)

- Depart runway, then turn left downwind.
- Once midfield, make a right turn to overfly where I-90 bridge meets Mercer Island maintaining 1,600 feet.
- Fly northeast bound to remain north of Mercer Island and south of downtown Bellevue.

## Kent Departure: (15 Aircraft)

- Depart runway southeast bound remaining EAST of I-5 and below 1,100 feet until abeam Renton Concrete Recyclers.
- Make a slight right turn to fly between Southcenter and the railroad tracks to downtown Kent.