

For Anchorage pilots, Special Federal Aviation Regulations Part 93 (SFAR 93) is a fact of life. What Merrill-based pilot doesn't know where the mouth of Ship Creek is? What Lake Hood pilot doesn't know where the ball fields are? However, is knowledge of checkpoints, and arrival, departure and transition routes all that's needed to comply with SFAR 93?

One overlooked component of SFAR 93 is altitudes. While most pilots know the altitudes for crossing Knik Arm in the various segments, pattern altitude at their favorite airport and the altitudes to fly to avoid Class C airspace, there's more.

- SFAR 93 minimum altitudes in each segment depend on indicated airspeed, not approach speed. Generally, aircraft indicating 105 knots or greater must fly at higher altitudes (1,200 feet MSL at Merrill and Elmendorf; 1,600 feet MSL at International). The "conventional" pattern altitude might not be correct.
- Most arrival and departure procedures contain altitudes (not just those crossing Knik Arm). Once ATC assigns a procedure and the pilot accepts, those altitudes become mandatory.
- Other minimum altitude rules still apply. Don't wait for your next flight review, check out FAR 91.119, 91.129 (e) (3) and 91.130 (a). Most, if not all, of the Anchorage area is "congested," so FAR 91.119 (b) (1,000 feet above obstacles within 2,000 feet laterally) applies.

Like visibility and cloud clearance, minimum altitudes are the pilot's responsibility. ATC cannot waive them, even by issuing a Special VFR clearance. If an ATC instruction or clearance contains too low an altitude, the pilot should ask for a higher altitude or different route.

Imagine flying a non-transponder equipped aircraft in-bound to Merrill from over Point Mackenzie. You'd probably fly below 1,400 feet to avoid Class C airspace, and plan to remain at or below 600 feet over Knik Arm north of mid-channel in the Merrill segment. So 600 feet works, right? Maybe, except that ground level in that area is about 125 feet (Sleeper Strip field elevation). Even assuming that area is "sparsely populated," 600 feet works only if you can stay 500 feet away from people, vehicles, boats and structures.

Past mid-channel, what altitude applies? Either 900 feet or 1,200 feet depending on indicated airspeed. However, crossing the city, a congested area, you would maintain 1,000 feet above obstacles within 2,000 feet laterally. Based on the terminal chart, that requires an altitude between 1,355 feet and 1,489 feet, depending on route. On final, visual approach slope guidance (VASI, PAPI or

PLASI) controls. A stabilized descent in the pattern works, but plan to turn base to final on or above the visual approach slope guidance.

Almost any low-level arrival or departure in the Anchorage area requires a similar analysis. Sound too complicated for the cockpit? Pre-flight planning is the place to solve these kinds of problems.