CHAPTER 23.100  MOBILE AIRCRAFT SHELTERS.

Sections:

23.100  Mobile Aircraft Shelters
23.10.102.9  Mobile Aircraft Shelters

A.  General. Notwithstanding other requirements of this code, mobile structures for the housing of aircraft may be moved and maintained subject to the requirements set forth in this section.

B.  Location. Existing Mobile Aircraft Shelters (shelters) may be relocated on municipal airports. No such shelter shall be located closer than twenty (20) feet from any permanent building, mobile home or lot line, except where lot lines are along streets or aircraft taxiways whereby the twenty (20) feet may be measured from the centerline of the right of way; and except where such shelters are situated in a configuration providing periodic fire breaks in conformity with required building and fire codes. The location of each structure shall also comply with the requirements of title 21.

C.  Occupancy. Mobile Aircraft Shelters shall be used only for the following authorized purposes:
   1.  Storage of personal or business use aircraft and related spare parts;
   2.  Storage or use of tools subject to the limitations contained in subsection D. below; and
   3.  Minor maintenance or repair of aircraft by their owners or contract/licensed mechanics.

D.  Authorized Activities. Authorized activities shall include storage or maintenance of the following:
   1.  Storage of an aircraft for personal or business use, or in the case of smaller aircraft, more than one aircraft;
   2.  Hand tools and small power tools required to support authorized activities;
   3.  Spare parts such as:
      a.  tires and wheels
      b.  propellers
      c.  seats
      d.  avionics
      e.  hardware
      f.  wire and wiring supplies
      g.  lamps
      h.  small structural sections
      i.  personal and cargo parachutes, including packing and repairs to parachutes.
   4.  Work benches and shelves;
   5.  Storage cabinets;
   6.  Aircraft ingress winches and required electrical and communications utilities to support the same;
   7.  Routine cleaning of aircraft parts or the shelter;
8. Minor aircraft repairs, adjustments, and configurations;
9. Inspections, including annual inspections;
10. Installation or changing, or changing calibration of avionics;
11. Replacement of control surfaces, axles, bearings and aircraft accessories including but not limited to generators, alternators, fuel pumps, oil and vacuum pumps, magnets, batteries, cylinder heads and cylinder barrel replacement;
12. Open houses and posting signs for the purpose of showing or selling or subleasing a mobile aircraft shelter;
13. Storage of snowblowers or snow removal equipment;
14. Storage of compressors and related tools;
15. Unused oil not to exceed two (2) cases or ten (10) gallons;
16. Aircraft fuel in the aircraft tanks;
17. Lubricants in factory containers;
18. Emergency electrical generators;
19. Seasonal equipment such as ice augers, survival equipment and non-commercial fishing equipment; and
20. Personal vehicles in place of the aircraft when the aircraft is flying.

E. Unauthorized Activities. Mobile aircraft shelters shall not be used for any of the following:

1. Commercial activities including but not limited to:
   a. performing for hire annual inspections for other aircraft owners;
   b. commercial basing of aircraft for the purposes of guiding, air cargo or commuter operations where the mobile aircraft shelter is used for ancillary uses other than the actual storage of this aircraft; and
   c. commercial basing of aircraft for instructional purposes when the mobile aircraft shelter is used for purposes other than only storage of the aircraft.
2. Major repairs, including engine tear downs;
3. Welding of any kind;
4. Painting except for minor touch up painting utilizing small, hand-held spray cans;
5. Storage of non-aviation related products including but not limited to:
   a. furniture not related to authorized shelter uses;
   b. unrelated business records or files;
   c. equipment, tools, or other items of household or business use;
   d. vehicles not otherwise allowed, including snowmachines, motorcycles, all-terrain vehicles, automobiles, trucks;
   e. boats, except for rubber rafts and their motors;
   f. campers and camper shells;
   g. mobile homes;
   h. trailers;
   i. commercial generators and welders;
   j. used oil;
   k. fuel in drums or portable containers in excess of a total of five (5) gallons;
l. hydraulic oil in excess of a total of one (1) gallon.

F. **Heating Methods.** Heating mobile aircraft shelters may be provided as follows:
1. The following may be used as methods of heating authorized aircraft, vehicle, equipment or shelters:
   a. electric block-type with UL approval for such purposes;
   b. pan adhesion with UL approval for such purposes;
   c. individual catalytic heaters with UL approval for such purposes; and
   d. Forced air sealed combustion chamber heaters using outside combustion air connected to natural gas PROVIDED such heaters are UL approved and are designed, installed and operated in conformity with applicable building and fire codes.

2. The following shall not be used as methods of heating aircraft, vehicles, equipment or shelters:
   a. open flame heaters of any kind;
   b. propane heaters;
   c. diesel fired heaters; and
   d. “salamander” or kerosene catalytic heaters.

G. **Area and Height Limitations.** Individual shelters shall not exceed two thousand five hundred (2,500) square feet of usable floor area. Where two or more shelters are grouped together (or “nested” in “T-Hangar” configuration), the total gross floor area of such grouping shall not exceed twenty thousand (20,000) square feet on non-combustible construction without an approved area separation wall.
1. Adjacent shelters may be joined with non-combustible materials of similar design to original construction providing that they are separated by a one (1) hour rated fire door and applicable hardware. All floors shall be ground level, and no balcony or mezzanine floors shall be permitted, except that the areas which are not in the landing gear “footprint” may be insulated with insulfoam covered with plywood where said exposed materials are covered with an approved, rated, fire retardant coating.

2. Minimum spacing between groupings of shelters shall be sixty-five (65) feet, except when an area separation wall is provided as noted above and in concert with applicable building and fire codes. Maximum height of any portion of the structure above grade shall be twenty-five (25) feet, and subject to the appropriate, approved and adopted airport height zoning map.

H. **Design.** Shelters may be constructed of any non-combustible materials permitted by this code. Adequacy of design shall be evidenced by International Conference of Building Officials (ICBO) Research Report, computations by a registered engineer in the State of Alaska, or other additional information such as manufacturer’s specification sheets and test results, subject to the approval of the building official.

I. **Utilities.** Shelters may be connected to electrical, communications and natural gas utilities provided all devices utilized and all methods of installation and use meet the appropriate building codes and Municipal amendments thereto. If shelters are required in the future to be connected to water and/or sewer, and when and if such a requirement is perceived to exist, the Building Official shall provide guidance and where deemed appropriate and in the public interest, issue appropriate permits.
J. **Foundations.** Shelters shall be founded on a concrete slab with a sufficient sill between each unit to prevent liquid from flowing from one unit to another unit with appropriate anchorage for the units into the concrete slab. Maximum soil pressures shall be in accordance with this code.

K. **Anchorage.** Shelters shall be anchored to resist uplift and lateral forces. Anchors shall resist various forces through gravity and soil pressures. The suitability and capacity of anchors shall be established by appropriate test reports or computations. Anchors shall be installed in accordance with the manufacturer’s recommendations.

L. **Structural Strength.** Existing shelters are grandfathered. Any modifications to existing shelters shall be designed and constructed to meet criteria as required by the building code.

M. **Exits.** Exit requirements for portable aircraft shelters shall be as required in the building code.

N. **Protective Finish.** Shelters shall have protective finishes required by building code on exposed surfaces.