

Original sponsor: Senator Kilcher

Offered: 3/25/64
Referred: Rules

1 IN THE SENATE

BY THE RULES COMMITTEE

2 CS FOR SENATE BILL NO. 245

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 THIRD LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act to adopt the Alaska Coordinate
7 System; and providing for an effective
8 date."

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 * Section 1. AS 38 is amended by adding a new chapter to read:

11 CHAPTER 20. THE ALASKA COORDINATE SYSTEM

12 Sec. 38.20.010. ADOPTION. The system of rectangular
13 plane coordinates established by the United States Coast and
14 Geodetic Survey for defining and stating the positions or
15 locations of points on the surface of the earth within this
16 state is adopted. It is to be known as the "Alaska Coordi-
17 nate System."

18 Sec. 38.20.020. ZONES. For the purpose of the use of
19 this system the state is divided into ten zones, numbered
20 1 - 10, which are defined as follows:

21 (1) Zone 1: that part of Alaska lying east of
22 meridian $141^{\circ} 00'$ west of Greenwich;

23 (2) Zone 2: that part of Alaska lying between
24 meridians $141^{\circ} 00'$ and $144^{\circ} 00'$ west of Greenwich;

25 (3) Zone 3: that part of Alaska lying between
26 meridians $144^{\circ} 00'$ and $148^{\circ} 00'$ west of Greenwich and in
27 addition all of Perry Island and all of Esther Island, but
28 excluding all of Latouche Island, all of Evans Island, and
29 all of the Kenai Peninsula;

1 (4) Zone 4: that part of Alaska lying between
2 meridians $148^{\circ} 00'$ and $152^{\circ} 00'$ west of Greenwich and in
3 addition all of Latouche Island, all of Evans Island, and
4 all of the Kenai Peninsula, but excluding Marmot Island, all
5 of Afognak Island, all of the Barren Islands, all of Kalgin
6 Island, all of Perry Island, and all of Esther Island;

7 (5) Zone 5: that part of Alaska lying between
8 meridians $152^{\circ} 00'$ and $156^{\circ} 00'$ west of Greenwich and in
9 addition Marmot Island, all of Afognak Island, all of the
10 Barren Islands, and all of Kalgin Island;

11 (6) Zone 6: that part of Alaska lying between
12 meridians $156^{\circ} 00'$ and $160^{\circ} 00'$ west of Greenwich and in
13 addition Andronica Island and all of Nagai Island;

14 (7) Zone 7: that part of Alaska lying between
15 meridians $160^{\circ} 00'$ and $164^{\circ} 00'$ west of Greenwich and in
16 addition all of Unimak Island, but excluding Andronica
17 Island and all of Nagai Island;

18 (8) Zone 8: that part of Alaska lying between
19 meridians $164^{\circ} 00'$ and $168^{\circ} 00'$ west of Greenwich and in
20 addition King Island, Little Diomedé Island, and all of Cape
21 Prince of Wales, but excluding any of the Aleutian Islands;

22 (9) Zone 9: all islands in the Bering Sea lying
23 west of meridian $168^{\circ} 00'$ west of Greenwich, excluding any
24 of the Aleutian Islands, King Island, and Little Diomedé
25 Island;

26 (10) Zone 10: all of the Aleutian Island group
27 lying west and south of Unimak Pass.

28 Sec. 38.20.030. DESIGNATION OF ZONES. In any land
29 description in which it is used a zone of the coordinate

1 system is designated the "Alaska Coordinate System, Zone
2 ____."

3 Sec. 38.20.040. USE OF COORDINATE SYSTEM. The plane
4 coordinates of a point on the earth's surface, to be used
5 in expressing the position or location of the point in the
6 appropriate zone of this system, consist of two distances,
7 expressed in feet and decimals of a foot. One of these
8 distances, known as the "x-coordinate", gives the position
9 in an east-and-west direction; the other, known as the "y-
10 coordinate" gives the position in a north-and-south direc-
11 tion. These coordinates shall be made to depend upon and
12 conform to the coordinates, on the Alaska Coordinate System,
13 of the triangulation and traverse stations of the United
14 States Coast and Geodetic Survey in the state, as those co-
15 ordinates have been determined by the survey.

16 Sec. 38.20.050. LAND LYING IN TWO ZONES. When a tract
17 of land to be defined by a single description extends from
18 one coordinate zone into another, the positions of all
19 points on its boundaries may be referred to either of the
20 two zones, the zone which is used being specifically named
21 in the description.

22 Sec. 38.20.060. CHARACTERISTICS OF ZONES. The zones
23 of the Alaska Coordinate System have the following character-
24 istics:

25 (1) Zone 1 is an oblique Mercator projection of
26 the Clarke spheroid of 1866, having an origin at the inter-
27 section of parallel $57^{\circ} 00'$ north latitude and meridian 133°
28 $40'$ west of Greenwich, at which the scale is set one part in
29 10,000 too small, and through which the axis of symmetry is

1 in geodetic azimuth arc tangent $-3/4$, reckoned clockwise
2 from south. The origin is assigned values such that all
3 final coordinates will be positive.

4 (2) Zone 2 is a transverse Mercator projection of
5 the Clarke spheroid of 1866, having a central meridian 142°
6 $00'$ west of Greenwich, on which meridian the scale is set
7 one part in 10,000 too small. The origin of coordinates is
8 at the intersection of the meridian $142^{\circ} 00'$ west of
9 Greenwich and the parallel of $54^{\circ} 00'$ north latitude. This
10 origin is given the coordinates: $x = 500,000$ feet and $y =$
11 0 feet.

12 (3) Zone 3 is a transverse Mercator projection of
13 the Clarke spheroid of 1866, having a central meridian 146°
14 $00'$ west of Greenwich, on which meridian the scale is set at
15 one part in 10,000 too small. The origin of coordinates is
16 at the intersection of the meridian $146^{\circ} 00'$ west of
17 Greenwich and the parallel $54^{\circ} 00'$ north latitude. This
18 origin is given the coordinates: $x = 500,000$ feet and $y =$
19 0 feet.

20 (4) Zone 4 is a transverse Mercator projection of
21 the Clarke spheroid of 1866, having a central meridian 150°
22 $00'$ west of Greenwich, on which meridian the scale is set at
23 one part in 10,000 too small. The origin of coordinates is
24 at the intersection of the meridian $150^{\circ} 00'$ west of
25 Greenwich and the parallel $54^{\circ} 00'$ north latitude. This
26 origin is given the coordinates: $x = 500,000$ feet and $y =$
27 0 feet.

28 (5) Zone 5 is a transverse Mercator projection of
29 the Clarke spheroid of 1866, having a central meridian 154°

1 00' west of Greenwich, on which meridian the scale is set at
2 one part in 10,000 too small. The origin of coordinates is
3 at the intersection of the meridian 154° 00' west of
4 Greenwich and the parallel 54° 00' north latitude. This
5 origin is given the coordinates: $x = 500,000$ feet and $y =$
6 0 feet.

7 (6) Zone 6 is a transverse Mercator projection
8 of the Clarke spheroid of 1866, having a central meridian
9 158° 00' west of Greenwich, on which meridian the scale is
10 set at one part in 10,000 too small. The origin of co-
11 ordinates is at the intersection of the meridian 158° 00'
12 west of Greenwich and the parallel 54° 00' north latitude.
13 This origin is given the coordinates: $x = 500,000$ feet and
14 $y = 0$ feet.

15 (7) Zone 7 is a transverse Mercator projection
16 of the Clarke Spheroid of 1866, having a central meridian
17 162° 00' west of Greenwich, on which meridian the scale is
18 set at one part in 10,000 too small. The origin of co-
19 ordinates is at the intersection of the meridian 162° 00'
20 west of Greenwich and the parallel 54° 00' north latitude.
21 This origin is given the coordinates: $x = 700,000$ feet and
22 $y = 0$ feet.

23 (8) Zone 8 is a transverse Mercator projection
24 of the Clarke spheroid of 1866, having a central meridian
25 166° 00' west of Greenwich, on which meridian the scale is
26 set at one part in 10,000 too small. The origin of co-
27 ordinates is at the intersection of the meridian 166° west
28 of Greenwich and the parallel 54° 00' north latitude. This
29 origin is given the coordinates: $x = 500,000$ feet and $y =$

1 0 feet.

2 (9) Zone 9 is a transverse Mercator projection
3 of the Clarke spheroid of 1866, having a central meridian
4 $170^{\circ} 00'$ west of Greenwich, on which meridian the scale is
5 set at one part in 10,000 too small. The origin of co-
6 ordinates is at the intersection of the meridian $170^{\circ} 00'$
7 west of Greenwich and the parallel $54^{\circ} 00'$ north latitude.
8 This origin is given the coordinates: $x = 600,000$ feet and
9 $y = 0$ feet.

10 (10) Zone 10 is a Lambert conformal conic pro-
11 jection of the Clarke spheroid of 1866, having standard
12 parallels at north latitudes $51^{\circ} 50'$ and $53^{\circ} 50'$, along
13 which parallels the scale shall be exact. The origin of co-
14 ordinates is at the intersection of the meridian $176^{\circ} 00'$
15 west of Greenwich and the parallel $51^{\circ} 00'$ north latitude.
16 This origin is given the coordinates: $x = 3,000,000$ feet
17 and $y = 0$ feet.

18 Sec. 38.20.070. POSITION OF SYSTEM. The position of
19 the Alaska Coordinate System shall be as marked on the ground
20 by triangulation or traverse stations established in con-
21 formity with the standards adopted by the United States Coast
22 and Geodetic Survey for first-order, second-order, and third-
23 order work, whose geodetic positions have been rigidly
24 adjusted on the North American datum of 1927 and whose co-
25 ordinates have been computed on the system defined in this
26 chapter. Any such station may be used for establishing a
27 survey connection with the Alaska Coordinate System.

28 Sec. 38.20.080. LIMITATION. No coordinates based on
29 the Alaska Coordinate System, purporting to define the

1 position of a point on a land boundary, shall be presented
2 to be recorded in any public land records or deed records
3 unless such point is within two miles of a triangulation or
4 traverse station established in conformity with the stand-
5 ards prescribed in sec. 70 of this chapter. The two-mile
6 limitation may be modified by a state agency to meet local
7 conditions.

8 Sec. 38.20.090. USE OF SYSTEM NAME. The use of the
9 term "Alaska Coordinate System" on any map, report of survey,
10 or other document is limited to coordinates based on the
11 Alaska Coordinate System as defined in this chapter.

12 Sec. 38.20.100. USE OF PUBLIC LAND SURVEY DESCRIPTIONS.
13 Whenever coordinates based on the Alaska Coordinate System
14 are used to describe any tract of land which in the same
15 document is also described by reference to any subdivision,
16 line, or corner of the United States public land surveys,
17 the description by coordinates shall be construed as supple-
18 mental to the basic description of such subdivision, line,
19 or corner contained in the official plats and field notes
20 filed of record, and in the event of any conflict the
21 description by reference to the subdivision, line, or corner
22 of the United States public land surveys prevails over the
23 description by coordinates.

24 Sec. 38.20.110. USE OF SYSTEM NOT REQUIRED. Nothing
25 in this chapter requires any purchaser or mortgagee to rely
26 on a description, any part of which depends exclusively upon
27 the Alaska Coordinate System.

28 * Sec. 2. This Act takes effect January 1, 1965.
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