

# Four-Course, Low-Frequency Radio Range History by U.S. State

*(Authored by Tom Johnson © November 2020, All Rights Reserved)*

*Please note that this document is a **working draft** that may be incomplete in some areas and is subject to future updates. If you have any thoughts, comments or additions please send them to us on the **Contact page**.*

This history of four-course, low-frequency radio range (LFR) installations over the 31-year period from 1929 to 1960 was developed from these U.S. government sources:

**1929** - Department of Commerce (DOC), Aeronautics Branch, Air Commerce Bulletin, September 15, 1929

**1930** - DOC, Aeronautics Branch, Air Commerce Bulletin, December 1, 1930

**1931** - DOC, Aeronautics Branch, Air Commerce Bulletin, February 16, 1931 (Revised January 19, 1931)

**1931** - DOC, Aeronautics Branch, Airway Bulletin No. 1, General Airway Information, September 1, 1931

**1931** - DOC, Aeronautics Branch, Air Commerce Bulletin, November 16, 1931

**1932** - DOC, Aeronautics Branch, Air Commerce Bulletin, March 1, 1932

**1932** - DOC, Aeronautics Branch, Airway Bulletin No. 1, General Airway Information, September 1, 1932

**1932** - DOC, Aeronautics Branch, Air Commerce Bulletin, September 15, 1932 (Map format)

**1935** - DOC, Bureau of Air Commerce, Washington, March 5, 1935, Bureau of Air Commerce Radio Facilities and Broadcast Schedules (Air Navigation Division)

**1939** - Civil Aeronautics Authority, Tabulation of Air Navigation Radio Aids, September 1, 1939

**1944** - Army Air Forces Radio Facility Charts, T.O. No. 08-15-1, August 1, 1944

**1951** - U.S. Coast and Geodetic Survey Aeronautical Route Charts (RC 2201-2209) dated May 27, 1951 - December 28, 1951 (Limited coverage in Texas South of 28° N)

**1960** - U.S. Coast and Geodetic Survey Instrument Approach Procedure Charts, LF/MF Radio Range Two-letter Identifier Assignments effective August 25, 1960 plus later charts showing LFR's retaining three-letter identifiers

**Notes:** (1) Listings showing a LFR with the same name in different years does not preclude the LFR having been relocated. For example, between 1939 and 1944 the Boston, MA LFR was moved approximately 3.5 statute miles. The LF Ranges at Albany, Albuquerque, Omaha, Portland, OR, Raleigh, Rock Springs, Toledo, Tucson and other locations, have also had more than one site.

(2) The letters **A** and **L** indicate antenna configuration as Adcock vertical radiators or Loop radiators respectively. **H** = Non-directional beacon at an earlier or later LFR site

(3) Adcock or Loop antenna configuration information is not available in the 1932 and earlier or 1951 and later data. The bullet symbol (●) in the 1932, 1951 or 1960 column indicates the range was operating in that year. A pound sign (#) indicates under construction in 1932, 1935 or 1944).

(4) A **29, 30 or 31** in the 1932 column indicates an earlier first year of reported operation of a range also operating in 1932 unless otherwise noted. A note specifies the 1931 or 1932 list where the range first appears.

(5) The **1939** DOC Tabulation lists 24 civil (19 U.S. & 5 Canadian) and 9 military radio range stations not operated or maintained by the Civil Aeronautics Authority. Antenna configurations are not specified. The ranges are indicated by "●" in the 1939 column and, for the civil ranges, "Low Power" in the Notes.

(6) A month/year in the "Notes" indicates operation or non-operation of the LFR in an earlier or later year per the source indicated. A crossed-out date indicates the LFR was not shown on the chart of that date. While it may seem impossible for a specific range to be "On" a particular chart, that term is used if a leg or "beam" of a range is depicted on the margin of an adjoining chart. **Abbreviations:** AAF = Army Air

Forces Radio Facility Chart or Army Air Field; AM=Airway Map; LAC = Local Aeronautical Chart; Mult. Loc. = Multiple Locations; Not=To confirm not an apparent omission; RAC=Regional Aeronautical Chart; RC=Route Chart; SAC=Sectional Aeronautical Chart; sm=Statute Miles; UC=Under Construction; WAC=World Aeronautical Chart

**An interesting note from 1929** - The text associated with the list of radio range beacons in the September 15, 1929 Air Commerce Bulletin includes: "The following radio range beacons are now in operation during thick weather or other bad flying conditions or at any time upon request from pilots of aircraft equipped with radio receiving sets."

Revised November 19, 2020

Alabama 51 (green 51 = audit done)							
Location	1932	'35	'39	'44	'51	1960	Notes
Birmingham	#	A	A	A	•	•	9/1932 = "Under Construction"
Craig (Selma)				L	•		Not on 5/42 Birmingham SAC; On 9/56 RC 2217
Dothan				L	•		On 5/42 Birmingham SAC
Lawson				L	•	•	ID changed from LSF to CSG (Columbus) between 12/51 & 3/55
Maxwell				A	•	•	Not on 5/42 Birmingham SAC; 1960 = "Montgomery"
Mobile		L	A	A	•		Not on 3/55 RC 2217
Montgomery Muni Airport			•				"Low Power"; 029° Mag, 1 sm to Field
Muscle Shoals				L	•		On 9/56 RC 2217
Ozark						•	Cairns Army Air Field
Tuskegee				L			On 4/45 Birmingham SAC

Alaska (Incomplete North of Latitude 67° N)				
Location	No Data for 1929 - 1944	1951	1960	Notes
Adak		•		
Anchorage		•	•	
Aniak		•		
Attu		•		
Bethel		•	•	
Bettles		•		
Big Delta		•	•	
Cold Bay		•	•	
Cordova		•		
Eielson		•		
Fairbanks		•	•	
Farewell		•		
Galena		•		
Gulkana		•		
Hinchinbrook		•		
Homer		•	•	
Iliamna		•		
Kenai		•	•	
King Salmon		•	•	
Kodiak		•		
Mc Grath		•		
Merrill ?		•		East of Merrill Field, Ident = ALZ
Middleton		•	•	
Minchumina		•		
Moses Point		•		
Nenana		•	•	
Nome		•		

Northway					•		
Shemya					•		
Skwentna					•		
Summit					•		
Tanacross					•		
Tanana					•		
Unalakleet					•		
Yakataga					•		
Yakutat					•	•	

Arizona 51							
Location	1932	'35	'39	'44	'51	1960	Notes
Ashfork		L	L	L			Not on 2/47 WAC 405
Cochise				A	•	•	4/39 7/41 - 3/61 10/64 Douglas SACs
Douglas				L	•		2/43 2/44-3/45 2/46 7/48 1/49-3/54 9/54 SACs
Gila Bend				A	•	•	
Kingman	31 •	A	A	A			9 & 11/1931 as "Visual"; 3/1932 as Aural; Multiple locations
Luke							On 3/46 Prescott SAC
Phoenix			A	A	•	•	
Prescott					•	•	On 3/46 Prescott SAC
Tucson	#	A	A	A	•	•	Three sites 9/1932 = "Under Construction"
Wellton	#						9/1932 = "Under Construction"; Town = 28 miles E of Yuma
Williams				L			Not on 2/47 WAC 405
Winslow	31 •	A	A	A	•	•	9 & 11/1931 as "Visual"; 3/1932 as Aural
Yuma				A	•	•	

Arkansas 51							
Location	1932	'35	'39	'44	'51	1960	Notes
Blytheville							Located in <u>Missouri</u> , q.v.
Brinkley			L				62 miles E of Little Rock; 67 WSW of Memphis
Little Rock	#	A	A	A	•	•	9/1932 = "Under Construction"
Stuttgart				L	•		On 6/53 RC 2207
Texarkana	#	A	A	A	•	•	9/1932 = "UC"; On 2/34 Shreveport SAC
Walnut Ridge				L	•		<u>On</u> 3/43 Little Rock & 9/44 Tulsa SAC's; <u>Not</u> on 3/45 Tulsa SAC; <u>On</u> 7/50 & 6/53 RC 2207

California 51							
Location	1932	'35	'39	'44	'51	1960	Notes
Arcata NAS				L	•		On 9/1956 WAC 304
Alturas				A			1944 - "Under Const.," Not on 6/50 RC 2204
Auburn	31						On 1/1931 DOC ACB list & <u>not</u> thereafter

Bakersfield			A	A	•	•	On 4/62 Los Angeles SAC
Blythe			A	A	•	•	On 4/62 Los Angeles SAC
Burbank					•	?	On 4/55 WAC 405-S & 4/62 Los Angeles SAC
Camarillo					•	?	On 4/55 WAC 405-S & 4/62 Los Angeles SAC
Castle (Merced)					•	?	On 9/60 San Francisco SAC; 37° 19.84', -120° 31.07'
China Lake							On 9/59 Mt Whitney SAC
Daggett	31 •	A	A	A	•	•	9/31 & 11/31 as "Visual"; 3/32 as Aural; On 4/62 Los Angeles SAC
Donner Summit	31 •	L	L	L			"Summit" on all 1931 lists; On 2/49 Reno SAC
El Centro				L	•	•	
Fairfield /Travis				A	•	•	On 8/56 RC 2214 & On 10/60 SFO Local Chrt
Fontana	31 •	L					9 & 11/1931 list as "Visual"; 3/1932 as Aural
Fort Jones			A	A	•	•	
Fresno	31 •	A	A	A	•	•	1/1931 list ; On 4/62 Los Angeles SAC
Hamilton (AAB)				H			LFR on 8/43 San Francisco SAC
Indio			L	L			On 3/45 WAC 404
Inyokern, Navy					•		On 6/50 RC 2204; "China Lake" on 9/59 Mt. Whitney SAC
Long Beach			L	L	•	•	On 10/60 Los Angeles Local Chart
Los Angeles		A	A	A	•		On 8/56 RC 2214
Los Angeles (Burbank)			•				"Low Power"
Mather				L			
Miramar					•		<u>Not</u> on 7/50 RC 2214 or 12/55 RC 2219
Modesto			L				
Moffett Field				L	•	•	NAS; On 10/60 San Francisco Local Chart
Mount Shasta		A	L	L			Not on 6/50 RC 2204
Muroc				L	•		
Needles			L		•	•	<u>Not</u> on 8/44 RAC 11M; On 3/46 Prescott SAC; On 4/62 Los Angeles SAC
Newhall			L	L	•	•	On 4/62 Los Angeles SAC
Oakland	30 •	A	A	A	•	•	On 10/60 San Francisco Local Chart
Palmdale			A	A	•	•	On 4/62 Los Angeles SAC
Red Bluff			A	A	•	•	
Riverside			A	A	•	•	On 4/62 Los Angeles SAC
Sacramento			A	A	•	•	On 10/60 San Francisco Local Chart
Salinas				L	•		Not on 9/54 RC 2215
San Clemente				L			On 3/45 WAC 404
San Diego	#	L	A	A	•		9/1932 = "Under Construction"; On 4/55 WAC 405-S
San Francisco				L	•		On 8/56 RC 2214
Santa Ana			L	L	•		"El Toro" on 9/51 San Diego SAC
Santa Barbara				L	•		On 9/59 SFO SAC; Not on 9/60 SFO SAC
Santa Maria				L			On 3/45 WAC 404
Saugus	31 •	L	-				1/1931 list 3
Shasta Springs	#						9/1932 = "Under Construction"
Silver Lake			A	A	•		Not on 9/54 RC 2215

Stockton				unk	•	•	On 10/60 San Francisco Local Chart
Thermal					•		On 4/55 WAC 405-S
Whitmore				L	•		<u>Not</u> on 10/43 but <u>on</u> 4/44 Mt. Shasta SAC's; On 9/56 WAC 304
Williams	•	A	A	A	•	Not	9/1932 list; On 9/59 Sacramento SAC
Willows							"Proposed" in 1931 DOC Airways diagram

Colorado							
Location	1932	'35	'39	'44	'51	1960	Notes
Akron			A	A	•	•	<del>10/37</del> 2/39 - 11/60 <del>6/63</del> CYS & DEN SACs
Denver			A	A	•	•	<del>3/36</del> 2/39 - 6/63 <del>6/65</del> Denver SAC's
La Junta				L	•		<del>3/40</del> 5/41 - 11/58 <del>5/59</del> Denver SAC's
Peterson / Colo Springs				L	•		4/44 2/45 - 11/53 <del>5/54</del> Denver SAC's "Colorado Springs" from 8/48 Denver SAC
Pueblo		L	L	A	•	•	3/36 - 11/60 <del>6/63</del> Denver SAC's
Trinidad			A	A	•		On 12/55 RC 2219

**Connecticut** - See New England States

Delaware & Maryland							
Location	'32	'35	'39	'44	'51	1960	Notes
DE - Dover							On 8/53 RC 2201 & 9/56 RC 2217
DE - New Castle				L	•		<u>Not</u> on 5/43 Washington SAC; On 9/56 RC 2217
DE - Wilmington			•				"Low Power" At Du Pont Airport
MD - Andrews SE edge AAFB							On 9/47 Wash SAC; Not on 3/50 2203
MD - Baltimore				L	•	•	On 5/43 Washington SAC
MD - Brandywine; 38° 41' 51" N, 076° 51' 46" W					•	•	On 9/47 Washington SAC; "ADW" on 3/50 RC 2203; "Camp Springs" in 1960
MD - Patuxent River NAS				L	•	•	
MD - Washington					•	•	Moved from VA; On 3/50 RC 2203

Florida							
Location	1932	'35	'39	'44	'51	1960	Notes
Banana River NAS				L			On 2/46 Orlando SAC
Crestview				A	•	•	
Cross City				A	•	•	
Daytona Beach			L	L	•	•	
Eglin				L	•		On 5/56 Florida (State) Aero Chart (AC)
Fort Meyers				A	•		On 8/43 Miami SAC; On 10/55 RC 2218
Hendricks				L			On 8/43 Miami SAC
Homestead				L	•		On 5/56 Florida (State) Aero Chart (AC)
Jacksonville	•	L	A	A	•	•	9/1932 list

Jacksonville NAS					•		On 5/56 Florida AC; ~4 sm W of field
Key West	<b>29</b> •	L	L	A	•	•	
Marianna				L			
Melbourne			A	A	•		"Melbourne NAS" in 1944; On 5/56 Florida AC
Miami		L	A	A	•		On 5/56 Florida (State) Aero Chart (AC); Multiple locations
Morrison Field				L			On 8/43 Miami SAC; See W. Palm Beach
Orlando				L	•		On 5/56 Florida (State) Aero Chart (AC)
Pensacola			•	A	•		1939 - Navy; On 5/56 Florida AC
Richmond NAS				L			
Russell							On 2/46 Jacksonville SAC at 30° 02' N, 081° 44' W
Saufley NAS (NUN)					•		On 5/56 Florida AC; ~7 sm SW of field
Tallahassee				A	•	•	
Tampa			A	A	•		On 5/56 Florida (State) Aero Chart (AC)
Titusville		L					
Tyndall				L	•	•	"Panama City AFB" in 1960
West Palm Beach					•	•	Probably "Morrison" in 1944
Whiting					•		On 2/47 Mobile SAC; On 5/56 Florida AC

Georgia							
Location	1932	'35	'39	'44	'51	1960	Notes
Albany				L	•	•	On 3/43 Savannah SAC
Alma	#	L	A	A	•	•	9/1932 = "Under Construction"
Atlanta	<b>30</b> •	L	A	A	•	•	
Atlanta NAS				L	•		On 9/56 RC 2217
Augusta			A	A	•	•	
Campbellton					•		~ 14 sm W of ATL Arpt; On 9/56 2217
Columbus							Name changed from Lawson '51-'55
Glynco NAS				L	•		On 10/55 RC 2218
Lawson							Located in <u>Alabama</u> , q.v.
Macon			L	L	•	•	
Moody 1951 = VAD				L	•		On 10/55 RC 2218
Rome					•		On 9/56 RC 2217
Savannah			L	L	•	•	
Spence				L			

Hawaii					
Location	No data <'47	'47	'51	1960	Notes
Hilo		•	•	•	On 11/60, Not on 12/64 Hawaiian Islands SAC
Honolulu		•	•	•	On 11/60, Not on 12/64 Hawaiian Islands SAC
Kaneohe		•			
Maui		•	•	•	On 11/60, Not on 12/64 Hawaiian Islands SAC
Port Allen		•	•		On 11/59, Not on 11/60 Hawaiian Islands SAC

Idaho							
Location	1932	'35	'39	'44	'51	1960	Notes
Boise 2 Sites	31 •	L	A	A	•	•	1/1931 list; 1/36 - 3/60 <del>5/65</del> Boise SACs
Burley 2 Sites	31 •	L	A	A	•	•	1/1931 list; 1/36 - 5/65 <del>5/66</del> Boise SACs
Coeur d'Alene			L	L	•		On 5/52 RC2202; Not on 1/55 RC 2212
Dubois			A	A	•	•	
Idaho Falls		L	A	H	•	•	2 sites; <u>LFR</u> again on 5/46 Pocatello SAC
Kellogg							On 4/36 Spokane SAC
Malad City					•	•	On 2/45 Pocatello SAC
Mullan Pass							See Montana
Pocatello			L	L	•	•	

Illinois							
Location	1932	'35	'39	'44	'51	1960	Notes
Belleville, Scott AAF/AFB; 2 Sites			•	A	•	•	"Scott" in 1944 <del>5/42</del> 10/42 - 12/60 <del>2/65</del> Cincinnati SACs
Chicago	30 •	L	A	A	•		On 7/58 Chicago LAC
Chicago Muni Apt			•				"Low Power"
Cicero	29						Effective Nov. 1, 1929; Replaced by "Chicago" in 1930
Effingham		L	L	L	•		<del>11/33</del> 1/34 - 12/60 <del>2/65</del> Cincinnati SACs
George				L			<del>10/42</del> 11/43 - 11/45 <del>4/46</del> Cincinnati SACs
Glenview NAS				L	•		On 7/58 Chicago Local Chart
Harvey				L	•		On 12/56 Chicago SAC; <u>Not</u> on 7/58 LAC
Joliet			A	A	•	•	
Moline							Located in <u>Iowa</u> , q.v.
Moline			•				"Low Power" Operated by United Airlines
Morse			L				LFR on 2/43 Des Moines SAC; "Bradford" NDB (H) with same "MQ" identifier in 8/44
Peoria			A		•	•	<u>Not</u> on 11/1944 Regional Chart 8M; On 4/47 Cincinnati SAC
Pontiac							"Projected" in 1931 DOC Airway diagram
Rantoul, Chanute AAF/AFB			•	A	•		"Chanute" in 1944; On 12/55 RC2219; <u>NDB</u> on 12/56 Chicago SAC
Rockford	#	A	A	A	•		9/1932 = "UC"; On 7/58 Chicago LAC
Springfield			A	A	•	•	<del>9/38</del> 5/39 - 12/60 <del>2/65</del> Cincinnati SACs
Sterling	29 •	L					

Indiana							
Location	1932	'35	'39	'44	'51	1960	Notes
Bunker Hill				L			On 5/45 Chicago SAC; Not on 1/47 RC 2201
Evansville	31 •			A	•		On all 1931 & '32 lists; 3/33-1/34 <del>6/34-12/41</del> 5/42-10/42



							41/43-5/44 5/45-1/54 6/54 Cincinnati SACs; 2 Sites
Fort Wayne			•	L			1939 = "Low Power" oper by Airport or TWA
Fort Wayne					•	•	On 1/47 RC 2201
Freeman				L			Renamed "Walesboro" on 11/44 RAC 9M; Same location; Not on 3/50 RC 2203
Goshen	29 •	L	A	A	•	•	
Indianapolis	31 •	L	A	A	•	•	1/31 list; 3/33 - 12/60 <del>2/65</del> Cincinnati SACs
Lafayette			L	L	•		On 12/53 CHI Sect; Not on 11/54 RC 2213
South Bend			A	A	•	•	
Terre Haute	31 •	L	L	L	•		1/31 list; 3/33 - 9/58 <del>3/59</del> Cincinnati SACs

Iowa							
Location	1932	'35	'39	'44	'51	1960	Notes
Burlington	•	A	A	A	•		9/1932 list; Not on 10/54 RC 2219
Des Moines	29 •	A	A	A	•	•	
Fort Madison	31 •						On all 3 1931 lists; Not on 1st 2 of 3 1932 lists
Iowa City			•				"Low Power"
Moline			A	A	•	•	
Sioux City			L	L	•	•	

Kansas							
Location	1932	'35	'39	'44	'51	1960	Notes
Chanute			A	A	•	•	
Dodge City				L			On 3/45 Wichita SAC
Garden City				A	•	•	
Great Bend				L			On 3/45 Wichita SAC
Hutchinson				L	•	•	
Lebo		L	L	L	•		Not on 10/54 RC 2219
Liberal				L			On 3/45 Wichita SAC
Marshall				A			"Fort Riley" on 3/43 Kansas City SAC
Moran	31 •	A					1/1931 list
Olathe				L	•		On 6/56 RC 2216
Pratt				L			On 3/45 Wichita SAC
Salina				L			"Smoky Hill" on 3/44 RAC 8M
Topeka				L	•	•	Multiple locations; "Forbes AFB" & Ident "TE" in 1960;
Wichita	30 •	A	A	A	•	•	On 11/30 AM 103

Kentucky							
Location	1932	'35	'39	'44	'51	1960	Notes
Bowling Green					•	•	On 3/50 RC 2203; ~ 10 sm SW of Smiths

							Grove site
Godman				L	•		LFR on 7/51 RC 2203; NDB on 10/51 2208
Louisville		L	L	L	•		<del>6/34</del> 4/35 - 6/57 <del>42/57</del> Cincinnati SACs
Smiths Grove	#		A	A			9/1932 = UC

Louisiana							
Location	1932	'35	'39	'44	'51	1960	Notes
Alexandria				L	•	•	
Barksdale				L	•	•	"Shreveport AFB" in 1960
Baton Rouge				L	•	•	On 7/43 Beaumont SAC; "Harding" in 1944
De Ridder				L			On 7/43 Beaumont SAC; <u>Not</u> on 1/50 RC 2207
Lake Charles			A	A	•		On 9/56 RC 2217
Monroe				L	•	•	
New Orleans		L	A	A	•	•	
Shreveport	#	A	A	A	•	•	9/1932 = "UC"; On 2/34 Shreveport SAC

**Maine** - See New England States

**Maryland** - See Delaware & Maryland

**Massachusetts** - See New England States

Michigan							
Location	1932	'35	'39	'44	'51	1960	Notes
Battle Creek				L	•	•	On 4/43 Milwaukee SAC
Detroit	<b>30 ?</b>	L	A				<u>Not</u> on 1931 or 1932 lists; On 4/43 Detroit SAC with "DT" ID
Grand Marais					•		On 3/57 Instrument Approach Chart
Grand Rapids			L	L	•		On 1/56 RC 2213
Houghton					•	•	<del>5/47</del> 12/37 - 4/60 <del>7/64</del> Duluth SACs
Lansing			A	A	•	•	
Muskegon				L	•	•	On 4/43 Milwaukee SAC
Romulus				A	•		"Detroit" w/RML ID on 7/58 Cleveland Local
Sault Ste. Marie			•	Unk	•	•	1939 - "Low Power" & 296° M, 0.5 sm to Field
Selfridge			•	A	•	•	1939 - "Low Power"; 1960 - "Mt. Clemens AFB"
Traverse City			•	A	•	•	1939 - "Low Power" & 027° M, 0.8 sm to Field

Minnesota							
Location	1932	'35	'39	'44	'51	1960	Notes

Alexandria			L	L	•	•	9/36 - 4/60 <del>7/64</del> Duluth SACs
Duluth				A	•	•	<del>6/41</del> 6/42 - 4/60 <del>7/64</del> Duluth SACs
Minneapolis	#	A	A	A	•	•	9/1932 = "UC"; On 11/34 Twin Cities SAC
Rochester				L	•	•	On 2/43 Dubuque SAC
Two Harbors				L			<del>11/42</del> 11/43 - 1/46 <del>5/47</del> Duluth SACs
Willmar					•		On 4/41 - 11/42 & 5/47 - 5/53 Aberdeen SACs

### Mississippi

Location	1932	'35	'39	'44	'51	1960	Notes
Columbus				L	•		Not on 5/42 Birmingham SAC or 10/51 RC 2208; On 12/51 RC 2207 & 9/56 RC 2217
Greenville				L			On 3/45 Little Rock SAC; Not on 7/50 RC 2207
Greenwood			L	L	•	•	
Jackson	#	A	A	A	•	•	9/1932 = "Under Construction"
Keesler				L	•		On 2/44 New Orleans SAC; "Biloxi" on 7/50 RC 2207; On 9/56 RC 2217;
Meridian			A	A	•	•	
Tylertown			L				Between New Orleans and Jackson

### Missouri

Location	1932	'35	'39	'44	'51	1960	Notes
Advance			A	A	•		On 6/53 RC 2207
Blytheville				L			On 7/50 RC 2207; From AR but in MO
Columbia	30 •	L	A	A	•	•	
Joplin					•		On 3/45 Tulsa SAC; Not on 10/54 RC 2219
Kansas City	30 •	A	A	A	•	•	
Kirksville		L	L	L	•		Not on 10/54 RC 2219
Neosho			L	L			On 9/44 Tulsa SAC; <u>Not</u> on 3/45 Tulsa SAC; Moved 30 statute miles N to Joplin
St Joseph				L	•		On 2/43 Des Moines SAC; Not on 10/54 RC2219
St Louis	31 •	L	A	A	•	•	1/1931 list
Sedalia				L			
Spring Bluff			L				On 3/43 Kansas City SAC at 38° 20.4', -91° 12.0'
Springfield	#		A	A	•	•	9/1932 = "Under Construction"
Vichy				L	•		On 11/54 RC 2216

Montana							
Location	1932	'35	'39	'44	'51	1960	Notes
Belgrade			A				<del>8/36</del> 3/38 - 4/43 Butte SACs; Became Bozeman LFR
Billings			A	A	•	•	On 2/36 Yellowstone Park SAC; <del>8/35</del> 8/36 - 10/60 <del>2/65</del> Butte SACs
Bozeman				A	•	•	Was Belgrade LFR; 4/44 - 10/60 <del>2/65</del> Butte SACs
Butte		L	L	L	•		<del>4/32 Map 140</del> ; 8/35 - 3/54 10/54 Butte SACs; 2 Sites, moved ~19 sm NW 1944
Custer			L	L			<del>5/39</del> 4/40 - 4/50 10/50 Butte SACs
Cut Bank				A	•	•	<del>4/43</del> 4/44 - 10/60 <del>2/65</del> Butte SACs
Dillon			L	L	•	•	
Drummond			A	A	•	•	<del>8/36</del> 3/38 - 10/60 <del>2/65</del> Butte SACs
Great Falls			A	A	•	•	<del>9/38</del> Glacier Park SAC; <del>3/38</del> 5/39 - 10/60 <del>2/65</del> Butte SACs
Helena			A	A	•	•	<del>8/35</del> 8/36 - 7/65 <del>2/66</del> Butte SACs
Lewistown				A	•	•	<del>5/39</del> 4/40 - 10/60 <del>2/65</del> Butte SACs
Livingston			A	H	•		On 2/36 Ystn Prk SAC; <del>8/35</del> 8/36 - 4/43 4/44 - <del>5/45</del> 10/45 - 11/56 <del>10/57</del> Butte SACs
Miles City			A	A	•	•	
Missoula			A	A	•	•	On 4/36 Spokane SAC; <del>8/35</del> 8/36 - 10/60 <del>2/65</del> Butte SACs
Mullan Pass			L	L	•	•	
Superior			L	L	•		On 5/52 RC 2202; Not on 1/55 RC2212
Whitehall			A	A	•	•	<del>8/36</del> 3/38 - 7/65 <del>2/66</del> Butte SACs

Nebraska							
Location	1932	'35	'39	'44	'51	1960	Notes
Ainsworth							LFR on 3/44 RAC 8M; 42° 32' N, 099° 56' W (approx.)
Alliance							On 9/44, 2/45 & 8/45 Casper SACs
Bruning				L			On 3/44 Lincoln SAC
Grand Island			L	L	•	•	
Hayes Center			A	A	•		<u>Not</u> on 5/52 RC 2202
Lincoln				L	•	•	"AFB" in 1960
North Platte	<b>30 •</b>	L	A	A	•	•	
Omaha	<b>30 •</b>	A	A	A	•	•	Multiple locations; At Offutt on 5/31 AM 150
Scottsbluff				L	•	•	On 7/42 Cheyenne SAC; Multiple locations
Scribner							LFR on 3/44 Lincoln SAC
Sidney	<b>30</b>	L	L	H			On 1/31 list; Not on 9/31, 11/31 or the 3 1932 lists; <u>LFR</u> on 7/42 Cheyenne SAC
York	<b>30 •</b>	L					On 2/36 Sioux City SAC

Nevada							
Location	1932	'35	'39	'44	'51	1960	Notes
Battle Mountain				L	•	•	On 4/44 RAC 6M; Replaced Buffalo Valley
Buffalo Valley			L				On 10/43 RAC 6M
Elko	31 •	A	A	A	•	•	On 1/1931 list
Fallon				#	•		On 10/44 Reno SAC & 8/56 RC 2214
Fernley	31 •	L					1/1931 list
Humboldt			L	L			Same location as Lovelock LFR
Las Vegas			A	A	•	•	On 4/62 Los Angeles SAC
Lovelock					•	•	On 2/49 Reno SAC; Same location & frequency as Humboldt LFR
Mormon Mesa							LFR on 5/41 RAC 7M; Not on 8/43 Mt. Whitney SAC
Reno		A	A	A	•	•	
Tonopah				A	•	•	

New England States							
State - Location	1932	'35	'39	'44	'51	1960	Notes
CT - Bridgeport					•	•	On 7/47 New York SAC
CT - Hartford			A	A	•	•	
MA - Boston	29 •	L	A	A	•	•	Eff. Oct. 1, 1929; Multiple locations
MA - South Weymouth				L			On 1/47 RC 2201; <u>Not</u> on 12/48 RC 2201
MA - Squantum NAS				L	•		On 11/55 RC2211
MA - Westfield; 2 sites				L	•	•	<del>4/40</del> 9/40 - 11/60 <del>2/65</del> Albany SACs
MA - Westover (AFB)				L	•	•	<del>40/42</del> 5/43 - 11/60 <del>2/65</del> Albany SACs; "Chicopee Falls(?)" from late 1950
ME - Augusta			L	L	•	•	
ME - Bangor			A	A	•	•	
ME - Brunswick Multiple locations				A		•	<u>On</u> 1/47 RC2201; <u>Not</u> on 12/48 RC 2201 <u>or</u> 7/54 RC 2211; <u>On</u> 11/55 RC 2211
ME - Houlton				L	•	•	
ME - Millinocket				A	•	•	
ME - Portland			L	L	•		On 11/55 RC2211
ME - Presque Isle				A	•	•	"Presque Isle AFB" in 1960
ME - Presque Isle Lczr				L			On 1/46 WAC 262; Not on 1/47 RC 2201 thru 10/51 2201; On 8/53 RC 2201
NH - Concord			L	L	•	•	
NH - Grenier				L			On 1/49 WAC 310; <u>Not</u> on 3/50 RC 2203
RI - Providence				L	•	•	On 5/41 Boston SAC
RI - Prov. State Airport			•				"Low Power"; 1.5 sm NE to Field
RI - Quonset Point				L	•	•	"NAS" in 1944 & 1960
VT - Montpelier					•		On 5/45 Albany SAC & 11/55 RC 2211
VT - Burlington			A	A	•	•	

**New Hampshire** - See New England States

New Jersey							
Location	1932	'35	'39	'44	'51	1960	Notes
Atlantic City					•	•	On 12/48 RC 2201
Camden		L	L				
Elizabeth		A					
Lakehurst NAS			•	L	•		1939 - "Low Power"; On 9/56 RC 2217
Millville					•		On 1/47 RC 2201; On 9/56 RC 2217
Newark			A	A	•		"Proposed" on 3/32 list; On 9/56 RC 2217
New Brunswick	29 •						Hadley Field; On 9/1932 List
Wildwood NAS				L			Not on 1/47 RC 2201
Wrightstown					•	•	On 12/48 RC 2201; "Ft. Dix AFB" in 1960

New Mexico							
Location	1932	'35	'39	'44	'51	1960	Notes
Acoma			L	L	•		<del>2/37</del> 2/39 - 1/42 <del>2/43</del> 2/44 - 2/54 9/54 Albuquerque SACs
Alamogordo				L			On 8/43 Roswell SAC; Not on 7/50 RC 2205
Albuquerque	31 •	A	A	A	•	•	9 & 11/1931=Visual; 3/1932=Aural; Three sites; 3/32 - 2/61 <del>3/65</del> Albuquerque SACs
Carlsbad				L	•		On 8/43 Roswell SAC; Not on 9/54 RC 2215
Clovis							<del>9/45</del> 2/46 - 3/47 <del>9/47</del> Albuquerque SACs
Columbus			A	A	•	•	<del>4/38</del> 7/39 - 3/61 <del>3/65</del> El Paso SACs
Deming				L			On 8/43 Roswell SAC; Not on 7/50 RC 2205
El Morro		L	L	L			On 2/47 WAC 405; Became Zuni by 8/49
Engle				H			LFR on 9/40 CAA Bulletin No. 24 map
Fort Sumner				L			<del>2/44</del> 9/45 <del>2/46</del> ABQ SACs; <u>On</u> 8/44 AAF
Hobbs				L	•	•	On 8/43 Roswell SAC
Hot Springs							ID HSP on 7/50 RC 2205; Had been Engle NDB
Las Vegas			A	A	•	•	<del>2/39</del> 6/39 - 2/61 <del>3/65</del> Albuquerque SACs
Otto			L	L	•	•	<del>4/35</del> 2/36 - 2/61 <del>3/65</del> Albuquerque SACs
Rodeo	#	A	A	L	•		9/32="UC"; 8/35-3/54 <del>9/54</del> Douglas SACs
Roswell				A	•	•	On 8/43 Roswell SAC
Truth or Consequences					•	•	Had been Hot Springs LFR in 7/50; ID =TCS in 12/51; Artifacts of Adcock LFR
Tucumcari		L	A	A	•	•	<del>3/32</del> 8/34 - 2/61 <del>3/65</del> ABQ SACs; 2 Sites
Zuni (was El Morro)					•		ID ZUN on 7/50 RC 2205; On 12/55 RC 2219

New York							
Location	1932	'35	'39	'44	'51	1960	Notes
Albany	31 •	L	A	A	•	•	1/31 Airway Map 122; 6/33 (1st SAC) - 11/60 <del>2/65</del> Albany SACs; Three sites
Buffalo	31 •	L	A	A	•	•	1/1931 list
Elmira		L	A	A	•	•	<del>7/34</del> 5/35 - 11/60 <del>2/65</del> Albany SACs
Endicott				L			"Localizer"; Not on 5/44, 1/45 Albany SACs
Floyd Bennett (New York)			L	L	•		"Brooklyn" (w/ FB ID) on 5/43 Washington SAC; Not on 6/53 RC 2207
Idlewild					•		On 7/47 New York SAC as "NY"; On 9/56 RC 2217; 40° 37.3' N, 73° 49.7' W
Islip, Islip Airport			•				"Low Power"
La Guardia			A	A	•		"New York" in 1939; On 9/56 RC 2217; Multiple locations
Mitchel (Hempstead)			•	A	•		1939 - "Low Power"; On 9/56 RC 2217
New Hackensack			L	Not			On 7/38 Albany SAC; Not on 5/43 - 1/47 Albany SACs; Became Poughkeepsie after 7/48 SAC
Poughkeepsie					•	•	On 1/49 Albany SAC
Rochester			L	L	•	•	<del>40/37</del> 7/38 - 11/60 <del>2/65</del> Albany SACs
Stewart				L	•		On 5/54 RC 2218; NDB on 11/54 RC 2213
Syracuse; 2 sites	31 •	L	A	A	•	•	1/1931 list; 6/33 - 11/60 <del>2/65</del> Albany SACs
Utica			L	L	•		<del>40/37</del> 7/38 - 5/59 <del>41/59</del> Albany SACs

North Carolina							
Location	1932	'35	'39	'44	'51	1960	Notes
Charlotte			L	L	•	•	
Cherry Point MCAS				L	•	•	
Greensboro	30 •	L	A	A	•	•	
Pope				A	•		On 9/56 RC 2217
Raleigh	•	L	A	A	•	•	9/1932 list; Multiple locations
Weeksville NAS				L	•		For CGAS Elizabeth City; On 9/56 RC 2217
Winston-Salem				L	•		On 9/56 RC 2217

North Dakota							
Location	1932	'35	'39	'44	'51	1960	Notes
Bismarck			A	A	•	•	
Dickinson			A	A	•	•	

Fargo	#	A	A	A	•	•	9/1932 = "Under Construction"
Golva			L	Not			46° 44' N, 103° 57' W; NDB on 3/45 Miles City SAC
Grand Forks			L	L	•	•	
Jamestown			A	H	•	•	<u>LF</u> R again on 5/48 Fargo SAC
Minot				L	•	•	On 5/43 Minot SAC
Pembina			A	A	•		On 5/52 RC 2202

Ohio							
Location	1932	'35	'39	'44	'51	1960	Notes
Akron			L	L	•	•	<del>3/37</del> 9/37 - 7/60 <del>4/61</del> Cleveland SACs
Archbold	31	L					On 9 & 11 /1931 lists; Not on any of 3 1932 lists; Airfield ~3.6 miles NNW of town; On 9/38, Not 2/39 Chicago SACs
Cincinnati 2 Sites	31 •	A	A	A	•	•	1/31 list; 3/33-2/67 <del>8/67</del> Cincinnati SACs
Cleveland 2 Sites	29 •	A	A	A	•	•	1/61 <del>5/63</del> Cleveland SACs
Cleveland Muni Apt			•				"Low Power" <del>9/37</del> 7/38 - 3/40 <del>4/43</del> SACs
Columbus	31 •	L	A	A	•	•	1/1931 list ; 1/61 <del>5/63</del> Cleveland SACs
Dayton				L	•		<del>12/39</del> 4/41 - 1/54 <del>6/54</del> Cincinnati SACs
Huntington, WV (located in Ohio)				L	•		On 3/43 Winston-Salem SAC; On 8/53 RC 2201; Not on 11/54 RC 2213
Lockbourne				L			8/44 - "Range under const." Not on 4/47 Huntington SAC
Patterson (Dayton)			•	A	•	•	2 Sites; <del>5/39</del> 12/39 - 12/60 <del>2/65</del> Cincinnati SACs
Toledo			A	A	•	•	<del>4/36</del> 10/36 - 1/61 <del>5/63</del> Cleveland SACs; Three sites, Moved in 1938 & 1952/53
Youngstown				L	•	•	<del>3/40</del> 4/43 - 1/61 <del>5/63</del> Cleveland SACs

Oklahoma							
Location	1932	'35	'39	'44	'51	1960	Notes
Altus				L			Not on 7/50 RC 2207
Ardmore				L			Not on 7/50 RC 2207
Enid				L	•		On 12/55 RC 2219
Frederick				L			Not on 7/50 RC 2207
Gage			A	A	•	•	
Oklahoma City	#	A	A	A	•	•	9/1932 = UC; On 3/62 Oklahoma City SAC
Shawnee				L			On 3/45 Wichita SAC; Not on 7/50 RC 2207
Tinker					•		On 3/48 OKC SAC; On 12/55 RC 2215
Tulsa	30 •	A	A	A	•	•	

Oregon							
Location	1932	'35	'39	'44	'51	1960	Notes
Arlington			A				On 4/43 La Grande SAC; <u>Not</u> on 9/43 RAC 1M
Astoria				L			Not on 6/50 RC 2204



Baker			A	A	•	•	
Eugene			A	A	•	•	Mult. Loc.; LFR relocated ~10 miles to NW between 3/43 and 9/43 charts; On 9/65, Not on 3/66 Klamath Falls SAC
Klamath Falls				A	•	•	<u>Not</u> on 10/43 but <u>on</u> 4/44 Mt. Shasta SAC's; On 4/65, Not on 9/65 Klamath Falls SAC
Medford	•	A	A	A	•	•	9/1932 list; On 4/65, Not on 9/65 Klamath Falls SAC
Medford			•				Mult. Loc.; On 2/36 Klamath Falls SAC; 1939 = "Low Power"; Operated by United Airlines
Pendleton			A	A	•	•	On 11/35 Airway Map 137
Portland	•	A					9/32 list; Multiple locations in OR; Moved to WA state between 11/35 & 9/39
Redmond				L	•	•	Artifacts show conversion to Adcock after 1944; On 4/65, Not on 9/65 Klamath Falls SAC
The Dalles				A	•	•	LFR moved from Washington between 9/43 & 8/44; See state of Washington
Tillamook				L			<u>Not</u> on 3/43 Portland SAC; <u>On</u> 9/43 Seattle SAC; Not on 6/50 RC 2204

Pennsylvania							
Location	1932	'35	'39	'44	'51	1960	Notes
Allentown			A	A	•	•	
Altoona					•	•	On 11/44 RAC 9M
Bellefonte	29 •	A	A	A			On 5/44; Not on 1/47 Cleveland SACs
Bellefonte - Visual	30 •						On 12/1930, all 3 1931 lists & 3/1932 list
Buckstown			L	L			<del>7/35</del> 10/35 - 5/44 <del>4/47</del> Cleveland SACs
Cove Valley			A	A			<del>7/38</del> 12/38 SACs; Became Altoona 1944
Erie	31 •	L	A	A	•	•	9/1931 list; 7/60 <del>4/64</del> Cleveland SACs
Harrisburg	•	A	A	A	•	•	3/1932 list
Harrisburg State Apt			•				"Low Power"; 265°, 2.5 sm to Field
Kylertown & Ames			•				4/36 10/36 - 3/40 4/43 Cleveland SACs; Moved to Ames Airport btwn 10/36-3/37
Martins Creek		L					On 9/35 RAC 10M; 40° 49.0' N, 75° 05.7' W
McConnellsburg							<del>2/35</del> 7/35 - 12/38 <del>3/40</del> Cleveland SACs
Mercer		# L	L				<del>2/35</del> 7/35 - 3/40 4/43 Cleveland SACs
Morgantown (WV)					•	•	On 4/47 Huntington SAC
North Philadelphia					•	•	On 7/47 New York SAC; 40° 07.2' N, 74° 58.3' W
Philadelphia				A	•		On 5/43 Washington SAC & 9/56 RC 2217
Philipsburg					•	•	<del>5/44</del> 1/47 - 1/61 <del>5/63</del> Cleveland SACs
Pittsburgh	•	A	A	A	•	•	3/1932 list; 1/61 <del>5/63</del> Cleveland SACs
Wilkes Barre				A	•	•	
Williamsport			•	L	•	•	1939 - "Low Power" & 277°, 7.5 sm to Field
Willow Grove (NAS)					•		On 7/47 New York SAC & 9/56 RC 2217; 40° 14.0' N, 75° 05.5' W

Rhode Island - See New England States

South Carolina							
Location	1932	'35	'39	'44	'51	1960	Notes
Charleston	•	L	A	A	•	•	9/1932 list
Charleston NAS Lcزر				L			Not on 10/50 RC 2208
Columbia			A	A	•	•	
Florence			L	L	•	•	
Greenville			L	L	•		On 10/55 RC 2218
Myrtle Beach				A			Not on 10/50 RC 2208
Parris Island				Unk			On 2/46 Jacksonville SAC; Not on 10/50 RC 2208
Spartanburg	30 •	L	A	A	•	•	
Sumpter, Shaw AFB					•	•	On 7/50 RC 2207

South Dakota							
Location	1932	'35	'39	'44	'51	1960	Notes
Aberdeen					•	•	4/40 11/42 5/44 12/44 12/45 - 8/65 3/66 Aberdeen SACs
Huron				L	•	•	4/40 - 6/60 3/65 Aberdeen SACs
Pierre				A	•	•	4/40 11/42 - 6/60 3/65 Aberdeen SACs; "Inop UFN" on 11/42, OK on 5/44 SAC
Rapid City				A	•	•	4/42 7/42 - 11/60 4/65 Casper SACs
Sioux Falls			A	A	•	•	
Watertown				L	•		4/40 - 5/53 6/54 Aberdeen SACs

Tennessee							
Location	1932	'35	'39	'44	'51	1960	Notes
Bristol			A	A	•	•	3/43 Winston-Salem SAC & 1944 = "Tri-City"; 1951 ID = "TRI"; 1960 ID = "TI"
Chattanooga	31 •	L	A	A	•		1/1931 list; On 9/56 RC 2217
Jacks Creek				L	•	•	
Knoxville			A	A	•	•	
Memphis	#	A	A	A	•	•	9/1932 = "Under Construction"
Memphis Muni Apt			•				"Low Power"
Memphis Navy					•		4.3 sm E of NAS Memphis (Millington)
Nashville	31 •	L	A	A	•	•	9/1931 list
Northern				L			Not on 7/50 RC 2207
Smithville			A	A	•		On 3/55 RC2217; NDB on 9/56 RC 2217

Texas							
Location	1932	'35	'39	'44	'51	1960	Notes
Abilene			A	L	•	•	
Alamo				L			On 7/46 San Antonio SAC
Alice				A	•*	•	On 7/43 Corpus Christi SAC
Amarillo	31 •	A	A	A	•	•	9 & 11/1931 as "Visual"; 3/1932 as Aural
Austin			L	L	•		On 9/56 RC 2217
Beaumont				L	•	•	On 7/43 Beaumont SAC
Beeville				Unk			1944 - "Operates Daylight Hours Only"
Big Spring		A	A	A	•	•	
Brownsville			A	A	•*	•	
Bryan				L	•		On 7/43 Austin SAC; On 9/56 RC 2217
Canadian	#	A					9/1932 Map = "Under Construction"
Childress							On 8/44 Dallas & Oklahoma City SAC's
Clarendon					•		On 3/48 Oklahoma City SAC & 11/55 RC 2215
Corpus Christi			A	L	•	•	
Corpus Christi NAS				L	•		On 7/43 Corpus Christi SAC
Dallas			A	A	•		On 12/55 RC 2215
Eagle Pass				L			
El Paso 2 Sites	#	A	A	A	•	•	9/32="UC" 8/35-3/61 3/65 El Paso SACs
Fort Worth	30 •	A	A	A	•		On 2/58 WAC 407
Foster				L			
Galveston			L	L	•		On 9/56 RC 2217
Goodfellow				L	•		On 7/43 Austin SAC; On 7/50 RC 2205 ID = SJT; On 12/55 RC 2215
Granbury				L			
Guadalupe Pass		L	L				8/35 - 7/39 4/41 El Paso SACs
Hitchcock				L			
Hondo				L			
Houston		L	A	A	•	•	
Laredo				H	•*		LFR on 7/46 San Antonio SAC; On 3/56 RC 2217
Laughlin				L			
Lubbock				L	•	•	On 2/43 Albuquerque SAC
Marfa				A			6/42 1/44 - 7/45 4/46 El Paso SACs
Midland				L	•	•	6/42 1/44 - 3/61 3/65 El Paso SACs
Moore				L	unk		On 7/43 Corpus Christi SAC
Navasota			L	L			On 7/46 San Antonio SAC
Palacios				L	•	•	
Pampa				L			On 3/45 Wichita SAC
Pecos							6/44 1/45 7/45 El Paso SACs
Perrin (Sherman)					•		On 7/50 RC 2205; On 12/55 RC 2215
Pyote				L			4/44 6/44 - 1/46 7/46 El Paso SACs
Randolph				L	•		On 7/43 Austin SAC; On 9/56 RC 2217
Richmond				L	•		On 9/56 RC 2217
Rockport				unk			1944 - "Operates Daylight Hours Only"

Salt Flat				L	•	•	<del>7/39</del> 4/41 - 3/61 <del>3/65</del> El Paso SACs
San Antonio		L	L	A	•		On 9/56 RC 2217
San Antonio, Kelly			•	Not	•		
San Marcos				L	•		On 9/56 RC 2217
Sweetwater	#						9/1932 = "Under Construction"; ?
Tyler			L		•		On 12/55 RC 2215
Waco			A	A	•	•	
Wichita Falls			A	A	•		On 12/55 RC 2215
Wink	#	A	A	A	•	•	9/32="UC" 8/35-3/61 <del>3/65</del> El Paso SACs

\* - 1951 chart not available for Alice, Brownsville & Laredo. All are on 3/56 RC 2217 and assumed to be operating in 1951

**Provisional Copy - July 29, 2015**  
**Pending inclusion of additional historic Sectional Chart data**

Utah							
Location	1932	'35	'39	'44	'51	1960	Notes
Delta			A	A	•	•	Not on 3/36 Grand Junction (GJT) SAC
Enterprise			A	A	•		On 9/59 Mt. Whitney SAC
Fairfield				L	•		<u>On</u> 2/43 Salt Lake City (SLC) SAC; <u>On</u> 3/54 GJT SAC; <u>Not</u> on 12/56 SLC SAC
Locomotive Springs		L	L				41° 42.5' N, 112° 55.2' W (approx.); On 5/34 AM 135; <u>Not</u> on 2/43 SLC SAC
Lucin				A	•	•	<u>On</u> 2/43 SLC SAC
Milford		L	L	L	•		<u>On</u> 9/51 GJT SAC; <u>Not</u> on 12/51 RC 2205
Ogden				A	•	•	<u>On</u> 2/43 Salt Lake City SAC
Plymouth			A	"Inop"			<u>On</u> 1/44 SLC SAC, later relocated to Malad City, Idaho
Salt Lake City	<b>31 •</b>	A	A	A	•	•	1/1931 list; On 11/31 AM 138 as at airfield; On 5/34 AM 135 as 1.7 sm N of field
SLC Airport			•				"Low Power" on 278 Kcs
Tintic			L				<u>Not</u> on 3/36 GJT SAC or 2/43 SLC SAC; 39° 56.3' N, 112° 11.5' W (approx.)
Wanship							"Projected" on early, undated range map (?)
Wendover			A	A	•		Not on 1/36 Elko SAC; On 9/57 WAC 305

**Vermont** - See New England States

Virginia							
Location	1932	'35	'39	'44	'51	1960	Notes
Arcola					•		On 4/47 Huntington SAC
Blackstone				L	•		On 3/43 Norfolk SAC
Front Royal				A	•	•	On 5/43 Washington SAC
Gordonsville			A	A	•	•	
Langley			•	A	•	•	1939 - "Low Power"
Lynchburg			A	A	•	•	On 4/47 Huntington SAC
Norfolk				L	•	•	On 3/43 Norfolk SAC
Norfolk NAS Lczr				Unk	•		'44 - "Operates during inclement weather"
Pulaski			A	A	•	•	
Quantico NAS				L	•		
Richmond	30 •	L	A	A	•	•	
Roanoke			A	A	•	•	
Tappahannock					•		On 3/50 RC 2203 & 9/56 RC 2217
Waverly							Not on 3/55 RC 2217; On 10/55 RC 2218; 36° 58' 10"N, 77° 11' 00" W
Washington, D.C.	30 •	L	A	A			In Virginia; On 12/48 RC 2201; Not on 3/50 RC 2203, Moved to Maryland

Washington							
Location	1932	'35	'39	'44	'51	1960	Notes
Bellingham				A	•	•	40/38 7/40 - 5/65 5/66 Bellingham SAC
Ellensburg			A	A	•	•	On 11/35 AM 137
Ephrata			L	L	•	•	On 4/36 Spokane SAC
Ethel			L				Near Toledo, name change?
Everett			L	L	•		On 8/56 RC 2214
Grand Dalles on 9/1932 list; See notes	•	L	L				"North Dalles" in 1935 & 1939 & on 11/41 Portland SAC; "Dallesport" on 9/43 RAC 1M; Then moved to Oregon before 8/44
Mc Chord				L	•	•	"Tacoma, Mc Chord AFB" in 1960
Navy Seattle					•		On 8/56 RC 2214
Neah Bay				A	•		On 9/43 Seattle SAC & 8/56 RC 2214
Pasco	31 •	A		L			1/1931 list ; 1935 listing: Handwritten note: "Discontinued "Aug 29 1935"; <u>Not</u> on 4/43 but <u>on</u> 4/44 La Grande SAC's; "NAS" in 1944
Portland			A	A	•	•	Moved from Oregon between 11/35 & 9/39
Seattle		A	A	A	•	•	On 11/33 Seattle SAC

Shelton					•		On 2/55 RC 2214; Not on 7/56 RC 2212
Spokane	#	L	A	A	•	•	9/1932 = "Under Construction"
Tacoma	•	L					9/1932 list; 1935 = "Low power"
Toledo				L	•		Previously Ethel?; On 11/41 Portland SAC and 8/56 RC 2214
Walla Walla			•	L	•	•	1939 - "Low Power" & 076°, zero sm to Field ; On 4/43 Spokane SAC
Whidbey Island				L	•	•	"Whidbey Island NAS" in 1960; On 9/43 Seattle & 5/66 Bellingham SAC's =
Yakima				L	•	•	On 3/43 Portland SAC

West Virginia							
Location	1932	'35	'39	'44	'51	1960	Notes
Charleston				H	•	•	<u>LFR</u> on 4/47 Huntington SAC
Elkins				A	•	•	
Huntington							Located in <u>Ohio</u> , q.v.
Martinsburg			L	L	•	•	
Morgantown							Located in <u>Pennsylvania</u> , q.v.

Wisconsin							
Location	1932	'35	'39	'44	'51	1960	Notes
La Crosse	#	L	A	A	•	•	9/1932 = UC; On 11/34 Twin Cities SAC
Lone Rock		L	L	L	•		Not on 11/54 RC 2216
Madison				L	•		On 7/56 RC 2212
Milwaukee	#	A	A	A	•	•	9/1932 = Under Construction

Wyoming							
Location	1932	'35	'39	'44	'51	1960	Notes
Casper				A	•	•	On 4/40 Casper SAC
Cherokee		L	L				On 4/40; Not on 7/42 Cheyenne SAC
Cheyenne	<b>30</b> •	A	A	A	•	•	On 11/60, Not on 6/65 Cheyenne SAC
Douglas				H			LFR On 4/40 thru 2/43 Casper SACs; <u>No</u> station of any type on 7/43 SAC; NDB on 1/44
Fort Bridger				A	•	•	On 2/43 SLC Sectional
Knight	<b>31</b> •	L	L				1/1931 list
Laramie			A	A	•	•	Mult. Loc. Not on 2/37 SAC; At airport on 10/37 SAC; ~3 sm NNW on 3/39 thru 11/60 SACs; Not on 6/65 Cheyenne SAC
Medicine Bow	<b>31</b>	L					<u>On</u> all 3 1931 lists; <u>Not</u> on any of 3 1932 lists; On 10/37, Not on 3/39 Cheyenne SAC
Parco / Sinclair			A	A	•	•	Renamed Sinclair on 2/43 Cheyenne SAC, same ID & Freq.; On 11/60, Not on 6/65 SAC

Rock Springs	31 ●	A	A	A	●	●	1/1931 list; Multiple locations
Sheridan				A	●	●	On 1/42 Casper SAC
Wamsutter							<u>LFR</u> on 7/42 Cheyenne SAC ( at 41° 42.8' N, 107° 55.5' W ) but <u>not</u> on 4/40 or 2/43 SACs

Total U.S. Four-Course, Low-Frequency Radio Ranges								
Type	1929	1932	1935	1939	1944	1951	1960	Notes
Total Ranges (48 states)	9	66	117	265	404	384	245	
Loop-Type Ranges			67	76	196			
Adcock-Type Ranges			50	161	202			
Unknown Type					6			
Low-Power Ranges, Civil, Non-CAA; Type unk				19				
Military Ranges, Type unk				9				
Alaska (S of 67° N )						36	11	Not incl. above
Hawaii						Unk	2	Not incl. above



## Long-Term Low-Frequency Aviation Radio Ranges

Operating 1932 through 1960 per Inclusion in 1932, 1935, 1939, 1944, 1951 and 1960 listings

[ **29** = Also on September 15, 1929 Department of Commerce Radio Range List ]

[ **30** = Also on December 1, 1930 Department of Commerce Radio Range List ]

[ **31** = Also on September 1, 1931 Department of Commerce Radio Range List ]

[ # = "Under construction" in 1932 ]

<b>AL</b> - Birmingham	<b>MA</b> - Boston - <b>29, 30 &amp; 31</b> Multiple locations	<b>OR</b> - Medford
<b>AZ</b> - Kingman - 31 Multiple locations Tucson - # Winslow - 31	<b>MN</b> - Minneapolis - #	<b>PA</b> - Erie - 31 Harrisburg Pittsburgh
<b>AR</b> - Little Rock - # Texarkana - #	<b>MS</b> - Jackson - #	<b>SC</b> - Charleston Spartanburg - <b>30 &amp; 31</b>
<b>CA</b> - Daggett - 31 Fresno - 31 Oakland - <b>30 &amp; 31</b>	<b>MO</b> - Columbia - <b>30 &amp; 31</b> Kansas City - <b>30 &amp; 31</b> St. Louis - 31	<b>TN</b> - Chattanooga - 31 Memphis - # Nashville - 31
<b>FL</b> - Jacksonville Key West - <b>29, 30 &amp; 31</b>	<b>NE</b> - North Platte - <b>30 &amp; 31</b> Omaha - <b>30 &amp; 31</b> Multiple locations	<b>TX</b> - Amarillo - 31 El Paso - # Wink - #
<b>GA</b> - Alma - # Atlanta - <b>30 &amp; 31</b>	<b>NV</b> - Elko - 31	<b>UT</b> - Salt Lake City - 31
<b>ID</b> - Boise - 31 Burley - 31	<b>NM</b> - Albuquerque - 31 Rodeo - #	<b>VA</b> - Richmond - <b>30 &amp; 31</b> Washington, DC - <b>30 &amp; 31</b>
<b>IN</b> - Goshen - <b>29, 30 &amp; 31</b> Indianapolis - 31	<b>NY</b> - Albany - 31 Buffalo - 31 Syracuse - 31	<b>WA</b> - Portland Multiple locations in OR & WA Spokane - #
<b>IA</b> - Des Moines - <b>29, 30 &amp; 31</b>	<b>NC</b> - Greensboro - <b>30 &amp; 31</b> Raleigh	<b>WI</b> - La Crosse - # Milwaukee - #
<b>KS</b> - Wichita - <b>30 &amp; 31</b>	<b>ND</b> - Fargo - #	<b>WY</b> - Cheyenne - <b>30 &amp; 31</b> Rock Springs - 31 Multiple locations
<b>LA</b> - Shreveport - #	<b>OH</b> - Cleveland - <b>29, 30 &amp; 31</b>	
	<b>OK</b> - Oklahoma City - # Tulsa - <b>30 &amp; 31</b>	

