Time Zones for Earhart Radio Message Database

In 1937, there apparently was no daylight savings time within the military. The US Navy, Army, and Coast Guard all used a standard reporting scheme for their radio messages of local time. In 1935 (or thereabouts), there was an experiment within the Navy to utilize Greenwich Mean Time (GMT), but only for a month of so. It wasn't until World War II that standardized radio messages used GMT time. The British used a standard reporting scheme of local time plus a letter designation for a section of longitude: A for 7.5^{o}E to 22.5^{o}E and increasing from East to West. There are 24 separate 15 degree segments, and if excludes the letters I and O (which can be confused with 1 and 0), that leaves the letter Z for 7.5oW to 7.5oE. This letter, Z, straddles the Greenwich meridian, and the military designation for "Z" is Zulu, which is why standard time is referred to as Zulu Time. Officially, it is now called the Universal Coordinated Time, or UTC (the initials are for the French version).

Prior to WWII, many parts of the world had time zones of 0.5 hours different than Greenwich Mean Time. For example, Hawaii's standard time was +10.5. To determine how to get back to GMT time from a local time, always add that number to get GMT time. To get from GMT time to local time, subtract the value if positive (west of Greenwich) to get local time; add the absolute value if the value is negative (east of Greenwich), or simply subtract the value. Don't forget the dateline: add a day if transiting east to west; subtract a day if transiting west to east. If this all sounds confusing, it is! Furthermore, Earhart and Noonan nearly crossed the International Date Line near the equator, the one place where you don't know whether you are north or south, and cannot determine what day it is! No wonder they got lost!

The Earhart radio message database has been organized in chronological order to better understand exactly what happened when. All (at least almost all)radio messages had a local time of filing attached to them, so one had to add the Time Zone value to get the GMT time. Most of the Time Zone information was obtained from the ship's bridge logs. Values of Time Zones are positive, unless otherwise noted; all times of TZ Change are in local time..

SHIP/Place	Time of TZ Change	Time Zone
Howland:		10.5
Jarvis		10.5
Baker		11
Honolulu		10.5
San Francisco		8
Washington, DC		5
London		-1
American Samoa		11
CINCUS		8
COMINBATFOR		10.5
COMDESCOFOR		8
COMAIRBASEFOR		8
COMBATSHIPS		8
COMAIRBATFOR		8
Duane	Jan. 13, 1937	10.5
	Jan. 15, 0530	11
	Jan. 24, 1300	10.5
Shoshone:	March 10, 1937, 0700:	10.5
	(stays 10.5 for duration of first attempt)	
Itasca:	June 19, 1937, 0000	10.5
	June 20, 1400	11
	June 22, 1400	11.5
	July 12, 1400	12
	July 14, 0000	11.5
	July 20, 1400	11
	July 23, 0800	10.5

SHIP/Place	Time of TZ Change	Time Zone
Ontario:	June 17, 1937, 0700	11
	June 18, 0000	12
	June 20, 1100	-12
	June 22, 1800	-11
	July 5, 0800	-12
	July 7, 1500	12
	July 9, 1500	11
Swan	July 1, 1937, 000	11
	July 6, 1300	11.5
	July 10, 0300	11
	July 10, 1700	11.5
	July 12, 1900	12
	July 15, 0000	-12
Colorado	July 3,1937, 1400	10.5
	July 4, 1300	11
	July 7, 1300	11.5
	July 14, 1300	10.5
Lexington, Drayton, Cushing, Lamson		
	July 1, 1937	8
	July 5, 1600	9
	July 7, 1600	10
	July 8, 1030:	10.5
	July 12, 1600	11.5
	July 21, 0300	10.5