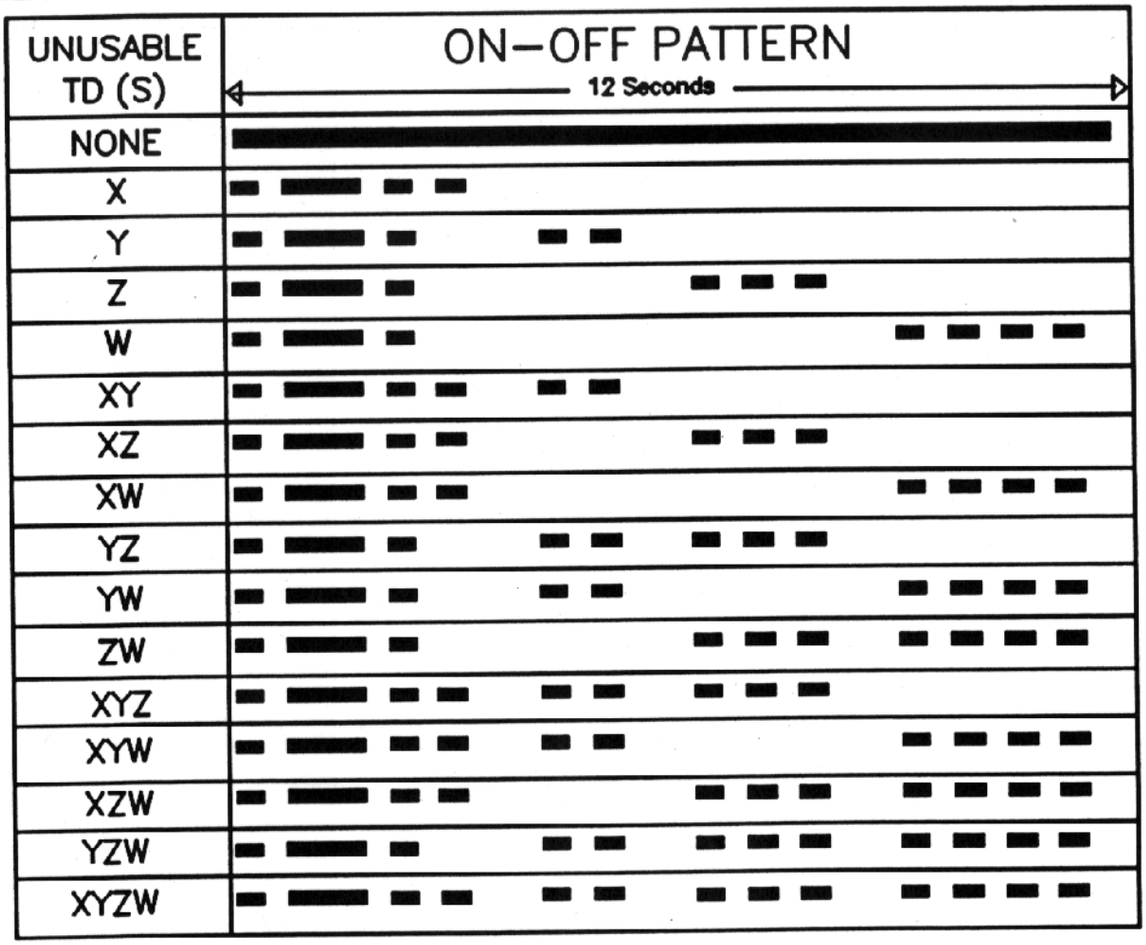

Figure 4 Master ninth pulse blink codes.

BIT TYPE	MODULATED AMOUNT +/-	GRI A FIRST PULSE	GRI A SECOND PULSE	GRI B FIRST PULSE	GRI B SECOND PULSE
DATA 1	1 usec	ADVANCE	RETARD	RETARD	ADVANCE
DATA 0	1 usec	RETARD	ADVANCE	ADVANCE	RETARD
SYNC	2.4 usec	ADVANCE	ADVANCE	RETARD	RETARD

Table 7 Balanced code transmission format

E. Dual-Rate Blanking

To provide contiguous service from one chain to the next, some stations are operated as members of two chains and radiate signals on two GRIs. Such stations are periodically faced with the impossible requirement of radiating overlapping pulse groups simultaneously. During the time of overlap, those pulses of one group which overlap any part of the other group's blanking interval are blanked or suppressed. The blanking interval for stations equipped with vacuum tube transmitters extends from 500 microseconds preceding the first pulse of the group to 1400 microseconds following the last pulse. The blanking interval for stations equipped with the new solid state transmitters (AN/FPN-64) is slightly longer, from 900 microseconds before the first pulse to 1600 microseconds after the last.

Blanking is accomplished in one of two ways: priority blanking or alternate blanking. In priority blanking, the same rate is always blanked at every overlap; the priority rate (never blanked) is generally selected to be the rate with the longest GRI. In alternate blanking, the priority role is time-shared between the two rates; the time-sharing period is set at four GRIs of one rate, generally the one with the longer GRI. (Note, alternate blanking may also be called "Alternate PCI Blanking".) The chain data sheets in appendix (A) identify which type of blanking is in use.

F. Signal Availability

The goal is 99.9% signal availability for each transmitting station and 99.7% for each triad, computed on an approximately monthly basis, including authorized off-air time. A baseline is considered not available when any of the following conditions exist:

a. TD out of tolerance
b. ECD out of tolerance
c. Improper phase code or GRI
d. Master or secondary station off-air or operating at less than one half of specified output power.

Routine equipment change-overs which are accomplished with no more than a 60 second suspension of Loran-C transmissions are considered as continuous transmissions.

G. Spectrum

The total energy outside the 90-110 kHz band shall be less than 1% of the total radiated energy. The energy below 90 kHz shall be no greater than 0.5% and the energy above 110 kHz shall be no greater than 0.5% of the total radiated energy.