RADIO RELAY CONCEPT PAPER 1701
RETHINKING TRUNK LINES FOR TRANSCONTINENTAL RADIO RELAY:
A Proposal Concept for Discussion

Background. A pair of factors -- fewer and fewer active and skilled operators and poor propagation prospects -- call for consideration of an alternative to the present inter-area evening cycle assigned CW traffic functions/schedule system.

The present IATN system is based upon the former NTS TCC assigned operator functions (Cycle 4: Stations A thru K). As fully staffed, this system requires a daily Cycle 4 commitment of 11 assigned operator/schedules – including four (4) operators to cover the two most distant functions, B to H and J to D.

The B/H and J/D functions are relying on fewer operators to maintain these functions on a daily basis. Recruiting efforts continue with marginal success.

Existing and expected HF propagation render B/H and J/D functions practically dysfunctional, both in terms of success rate and operator time merely attempting contact.

Proposal. Drawing on the concept of the early "ARRL Trunk Lines," it is proposed that the evening cycle of IATN migrate to a "modified trunk lines network" approach.

The IATN, Evening Cycle, area managers would jointly develop and establish a uniform set of *primary and secondary relay time-blocks and watch-frequencies*. These would be utilized by the assigned IATN area net liaison operators to relay (one, two or three-hop) traffic across country, and replace fixed single-hop schedules with assigned counterpart stations.

Evening *relay time-blocks* would typically follow area nets, primarily for east-to-west traffic; morning or afternoon *relay time-blocks* would handle west-to-east traffic and otherwise.

Designated *watch-frequencies* (primary and secondary) would be tracked and used by operators based upon band conditions.

IATN (Evening Cycle) managers would encourage assigned area net liaison operators to utilize the "truck lines" network, and to be reasonably active in monitoring *watch-frequencies* as potential QSP or coordination stations during *time-blocks.*

IATN reporting would essentially be the same (only assigned functions report). Relaying stations would not report for IATN purposes. IATN could continue to use existing letter-function nomenclature.

Conclusion. If the trunk lines migration is successful, function/schedules would no longer be required; there would conceivably be more flexibility for operators and a higher success rate; and the network could function effectively with the number of operators now active.