

THE NATIONAL TRAFFIC SYSTEM



The National Traffic System A Primer

- Introduction
- Principles of Operation
 - Policies
- Trans-Continental Corps
 - NTS Digital System

THE NATIONAL TRAFFIC SYSTEM



INTRODUCTION

The NTS is a system, sponsored by the ARRL and RAC that Has two objectives, to provide:

- For the rapid movement of message traffic from origin to destination, and
- Training in the handling of formal written traffic and participation in formal net operations.

THE NATIONAL TRAFFIC SYSTEM



INTRODUCTION

One of the most important features of the NTS is the “System” Concept.

No NTS net is a single entity in itself, but rather operates within an organized structure that allows all other NTS nets to perform their functions within the system.

THE NATIONAL TRAFFIC SYSTEM



INTRODUCTION

The NTS is not dedicated to one single mode of operation, but Provides for the use of the “best” mode for each specific net.

NTS nets use many modes (CW, SSB, PACTOR, RTTY, X25)
And all bands, 160m through VHF/UHF.

THE NATIONAL TRAFFIC SYSTEM



PRINCIPLES OF NTS OPERATIONS

The NTS utilizes four “level” of nets which operate in an orderly Time sequence to effect a definite flow pattern for traffic from origin to destination.

A message flows through the NTS, much as an airline passenger “flows” through the airline system from his/her point of departure to destination.

THE NATIONAL TRAFFIC SYSTEM



PRINCIPLES OF NTS OPERATIONS

The passenger takes “local” transportation (Taxi) from home to The airport (Nanaimo) to catch a “feeder” airline.

The passenger takes the “feeder airline” (JAZZ) from the local airport to the major airport (Vancouver).

THE NATIONAL TRAFFIC SYSTEM



PRINCIPLES OF NTS OPERATIONS

The passenger takes a “major airline” (Air Canada) from the Major airport (Vancouver) to another major airport (Toronto).

The passenger takes another “feeder airline” (JAZZ) from the Major airport (Toronto) to a local airport (Ottawa).

The passenger takes a cab from the local airport home.

THE NATIONAL TRAFFIC SYSTEM



PRINCIPLES OF NTS OPERATIONS

LOCAL NETS

Cover small areas, community, city, county, but not a complete Section.

Typically VHF or UHF.

Operation daily or weekly and at a convenient time and provide representation to Section nets.

PEMO Net, CRERCC Net

THE NATIONAL TRAFFIC SYSTEM



PRINCIPLES OF NTS OPERATIONS

SECTION NETS

Coverage of a complete ARRL/RAC Section.

Organizational and Procedural lines tighten.

Individual participation or representation from “Local” nets.

Provide representation to Region Nets

BCEN, BCYKN

THE NATIONAL TRAFFIC SYSTEM



PRINCIPLES OF NTS OPERATIONS

REGION NETS

Coverage of a much wider area, typically a call area.

Much tighter participation and procedures.

Representation from each Section net in the region.

Representation to an Area Net.

RN7 (AK, YK, NU, BC, AB, WA, OR, ID and MT).

THE NATIONAL TRAFFIC SYSTEM



PRINCIPLES OF NTS OPERATIONS

AREA NETS

Three NTS Area Nets (EAN, CAN and PAN).

Coverage wider again – PAN covers RN7, 6RN (CA, NV) and 12RN (WY, UT, CO, AZ and NM)

Tighter procedures and time constraints.

Representation to other Area Nets - Transcontinental Corps (TCC).

THE NATIONAL TRAFFIC SYSTEM



SEQUENCE OF NTS OPERATIONS

CYCLE 1

10:00 – Section Net
10:45 – Region Net
11:30 – Area Net
12:30 – Region Net

CYCLE 2

13:00 – Section Net
13:45 – Region Net
14:30 – Area Net
15:30 – Region Net

CYCLE 3

16:00 – Section Net
16:45 – Region Net
17:30 – Area Net
18:30 – Region Net

CYCLE 4

19:00 – Section Net
19:45 – Region Net
20:30 – Area Net
21:30 – Region Net
22:00 – Section Net

THE NATIONAL TRAFFIC SYSTEM



SEQUENCE OF NTS OPERATIONS

Normally only Cycle 2 and 4 are operational

CYCLE 2

13:00 – Section Net
13:45 – Region Net
14:30 – Area Net
15:30 – Region Net

CYCLE 4

19:00 – Section Net
19:45 – Region Net
20:30 – Area Net
21:30 – Region Net
22:00 – Section Net

THE NATIONAL TRAFFIC SYSTEM



NTS Digital OPERATIONS

24/7 Operations

Parallel System consisting of

Section Hubs (VA7HU BC)

Region Hubs (K7IFG RN7)

Area Hubs (K7BDU PAN)

THE NATIONAL TRAFFIC SYSTEM



NTS OPERATIONS

Traffic from Victoria to Halifax

BCYTN/BCEN (1900) → RN7 (1930)

RN7 (1930) → PAN (2030)

PAN → TCC → EAN (evening or morning)

EAN (1430/2030) → 2RN (1530/2130)

2RN (2130) → APN (2200)

THE NATIONAL TRAFFIC SYSTEM



Credits

This presentation was prepared
by Hew Lines, VA7HU.

It was originally presented to
the Saanich Peninsula
Amateur Radio Club (SPARC)
In September 2009.