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Federal Communications Commission
Office of the Secretary

FACT SHEET
NATIONWIDE TRANSPORTATION RADIOTELEPHONE SERVICE

America's Trucking Industry: An Overview

- Includes approximately 44,000 motor carriers with 2.6 million drivers; last year, the \$265 billion industry carried 4.1 billion tons of freight over more than 529 billion miles
- Is dependent upon reliable communications
 - Carriers must react quickly to changes in load scheduling, delivery and routing to optimize freight management
 - Especially important today when many businesses are adopting fluid inventory practices and "just-in-time" manufacturing
- Existing communications services do not adequately serve the needs of the trucking industry, forcing most carriers to use inefficient and outdated scheduling and routing procedures

Nationwide Transportation Radiotelephone Service

- TRX Transportation Telephone Company (TRX TransTel) devised the Nationwide Transportation Radiotelephone Service (NTRS) to provide a low cost solution to the industry's needs
- NTRS will merge PCS technology and other advanced communications systems
 - System of low-power terrestrial base stations strategically situated at truck stops, rest areas and truck terminals throughout the continental United States
 - Base stations will be interconnected to network central processor by satellite link or data packet networks
- When located within a base station service area, NTRS will provide a wide range of communications services tailored to the special needs of the trucking industry including:
 - Two-way voice and two-way mobile data communications
 - An advance messaging feature for signalling drivers of vehicles approaching a service area to access the system and retrieve waiting messages

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List A B C D E *0+1*

- **Vehicle location reporting**
- **Transmission of data from the truck's on-board diagnostic system, including information about oil and coolant levels, engine temperature and idle speed, average RPM and miles per hour and, in the case of refrigerated freight, trailer temperature**
- **Regional weather and traffic reporting**
- **Financial transactions services, including debit/credit payments for fuel, cash advances and check cashing**

The Promise of NTRS

- **Today, when the competitiveness of American business is being questioned at home and abroad, NTRS proposes to increase the efficiency of our nation's trucking industry and thereby enhance the productivity of American commerce**
- **Because of its essential contribution to America's business, the trucking industry requires a comprehensive, high quality, nationwide communications network that is efficient and economical; NTRS promises to revolutionize the way the U.S. trucking industry conducts its business by:**
 - **Transforming the outdated check-call procedure that requires drivers to check-in with dispatchers up to five times and possibly more each day; NTRS will permit drivers to contact dispatchers only when necessary**
 - **Improving timeliness and efficiency by reducing deadheading, a practice of hauling empty or partially empty trailers to locations with greater freight potential, and out-of-route miles, which are caused by traffic accidents, poor directions and load restrictions**
 - **Helping companies maximize vehicle safety and performance by providing "real time" access to truck performance data**
 - **Improving substantially driver conditions and thereby minimizing job frustrations**

NTRS Scenario

- Driver with loaded trailer is scheduled to arrive at construction site at 9 p.m.; as he travels north along I-95, he notices the flashing message alert indicator and hears the message alert tone and computer generated voice saying "American Truck Stop, Exit 64 East," signalling that a voice or data message is being held at the truck stop
- Driver's arrival at truck stop results in automatic transmission of truck performance data through NTRS to carrier's operations center
- By keying a code into his handset, driver retrieves a voice mail message from his dispatcher asking him to call her about a possible freight assignment for a retailer located near driver's current destination
- Driver returns dispatcher's call using handset, and dispatcher, after confirming that freight assignment is still available, gives driver information about transaction; driver then calls his wife to advise her that he will be home in time for dinner the following day
- Driver keys another code into handset and learns that no traffic incidents or serious weather conditions affecting the interstate have been reported
- Later, as driver continues toward his destination, dispatcher follows driver's progress with help of the NTRS vehicle location reporting; before leaving for the day, dispatcher calls construction site supervisor and assures him that delivery will be made well before the 9 p.m. deadline

The Company

- TRX TransTel is a joint venture owned:
 - 85% by PWTC Holding Corporation, a Delaware corporation
 - 15% by Advanced Wireless Communications Enterprises, Inc., a Missouri corporation
- Controlling principal of TRX TransTel is David A. Bayer, a highly-regarded telecommunications entrepreneur who owned and operated the CyberTel mobile communications companies, including the non-wireline licensee of the St. Louis MSA

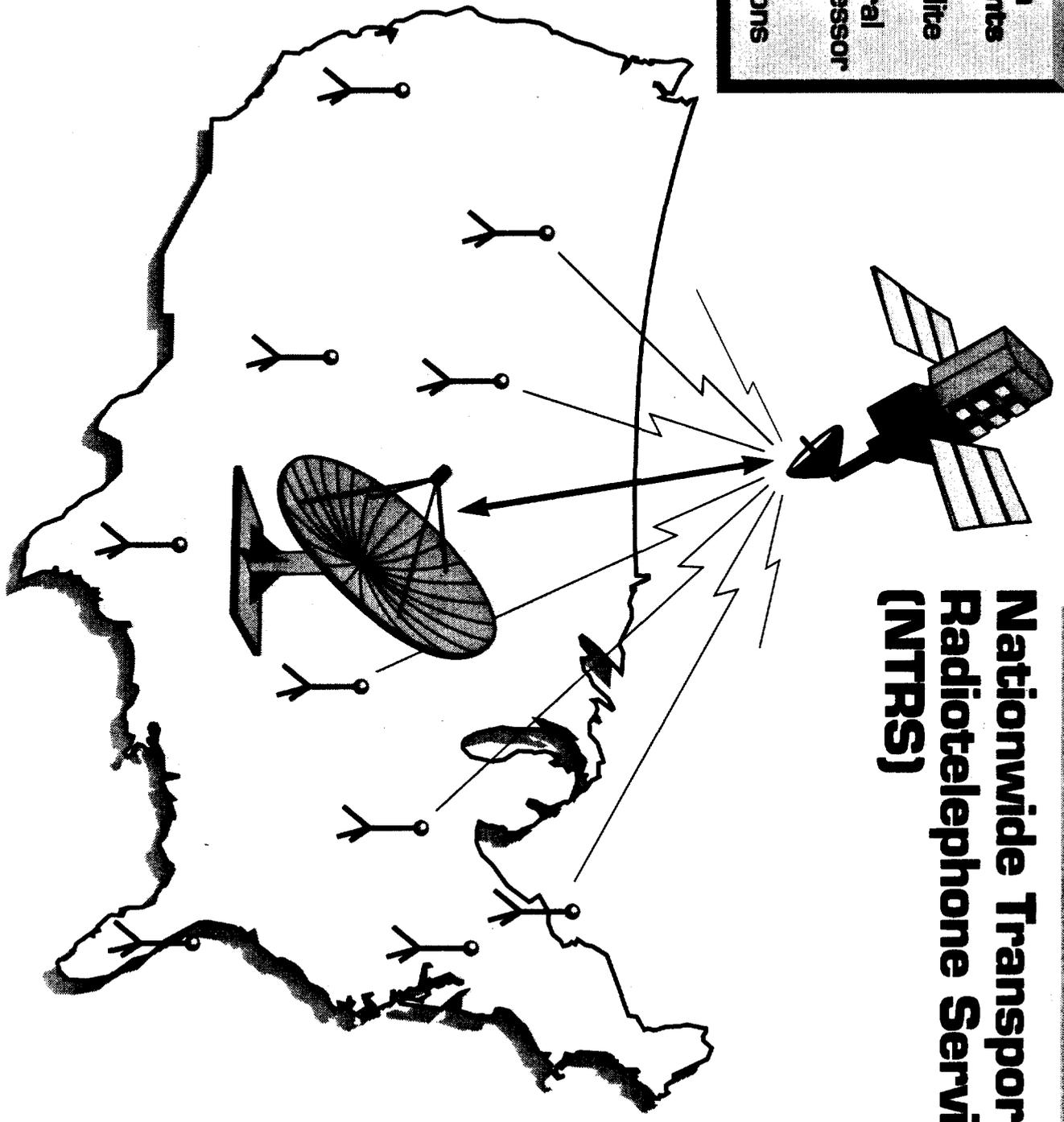
TRX TransTel's Pioneer's Preference Request

- TRX TransTel filed a Request for Pioneer's Preference seeking authority to launch NTRS
- TRX TransTel requests licensing on a nationwide basis to permit it to operate at all truck stops, rest stops and truck terminals throughout the continental United States; geographic market is, of necessity, nationwide in scope
 - Trucking industry is business whose markets are not defined by artificial political boundaries and which requires a consistent, nationwide network to enable drivers to access the system as they travel the nation's highways
 - For example, of the 2.6 million truck drivers, approximately 800,000 are long haul drivers (traveling more than 200 miles per day, averaging 110,000 miles per year)
 - NTRS is inherently nationwide in design and scope and, without a nationwide license, purposes of nationwide communications system would be defeated
 - Licensing scheme based on regional areas would produce disadvantages similar to those existing in cellular and other current terrestrial mobile communications services
 - Because TRX TransTel does not seek to offer continuous coverage throughout U.S., but only to geographically limited areas at truck stops, rest areas and truck terminals, the frequencies assigned to it could be used by other PCS providers in all other areas
- Unlike most pioneer's preference requests involving PCS, which propose generic, undefined service to metropolitan areas, NTRS focuses on rural locations and the unique needs of a mobile population that travels continually throughout the nation

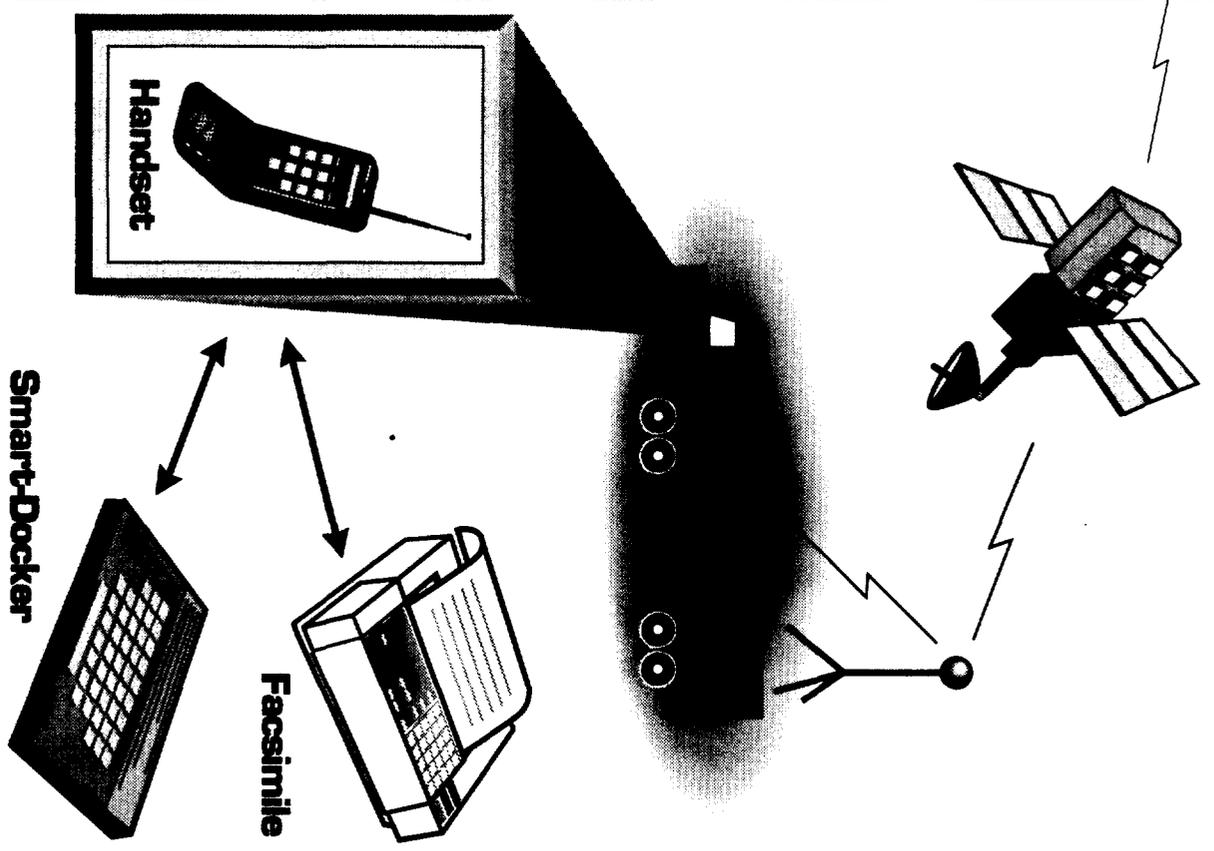
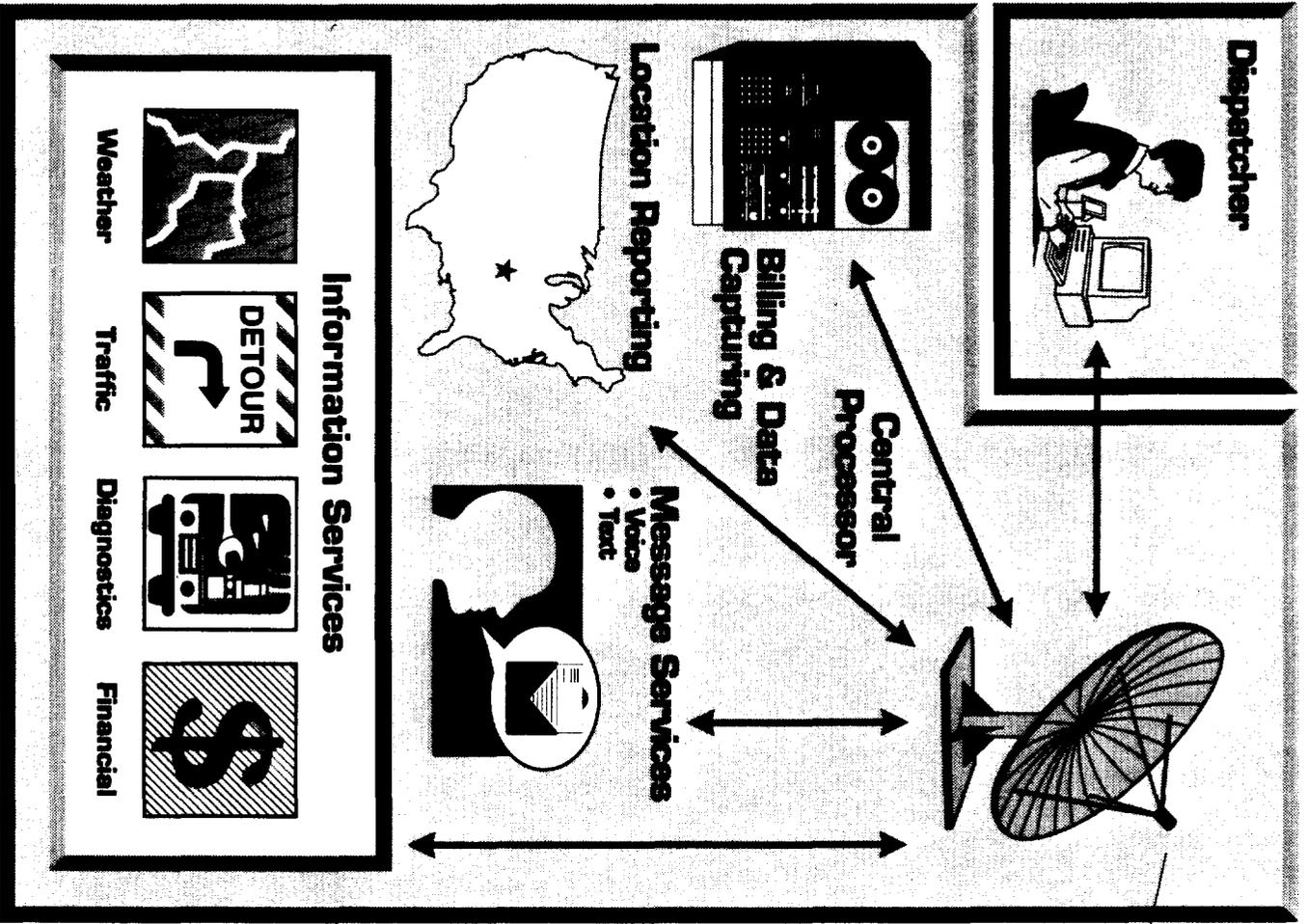
Nationwide Transportation Radiotelephone Service (NTRS)

System Components

-  Satellite
-  Central Processor
-  Base Stations

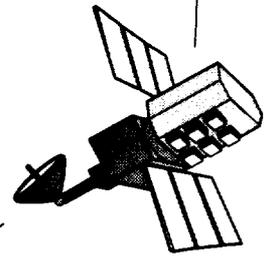
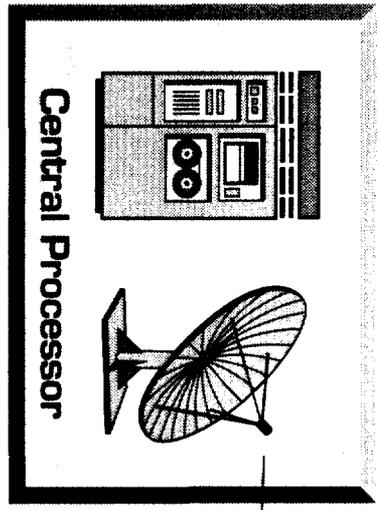


System Features



TRAX TransTel

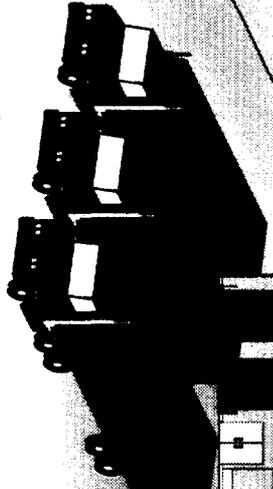
Hailing Process



Base Station



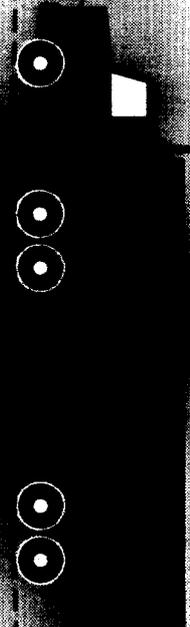
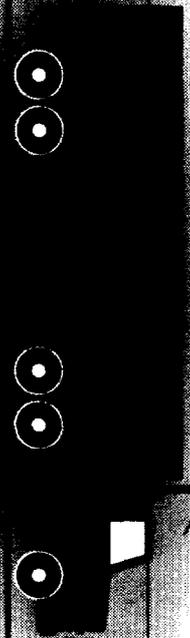
Pass Zone



Hailing Station

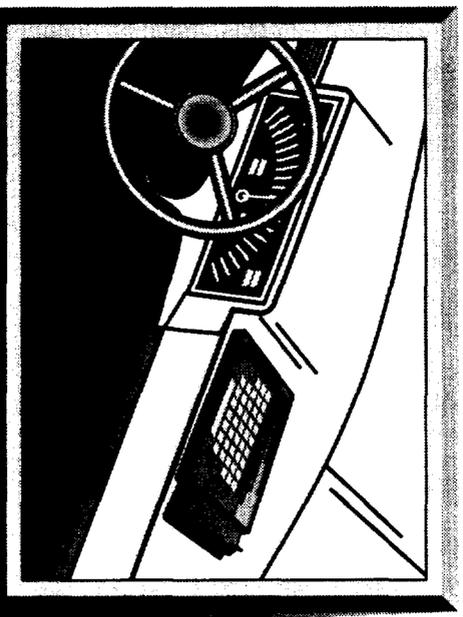


Hailing Station

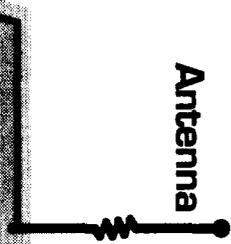




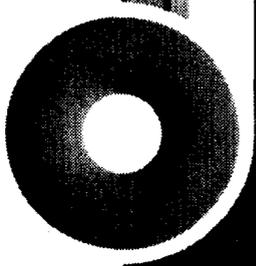
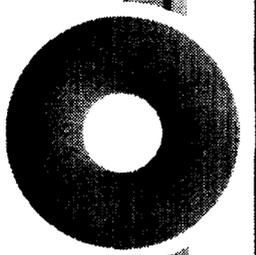
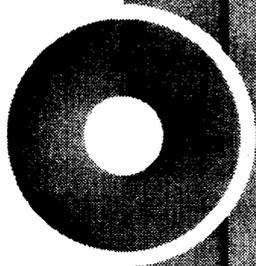
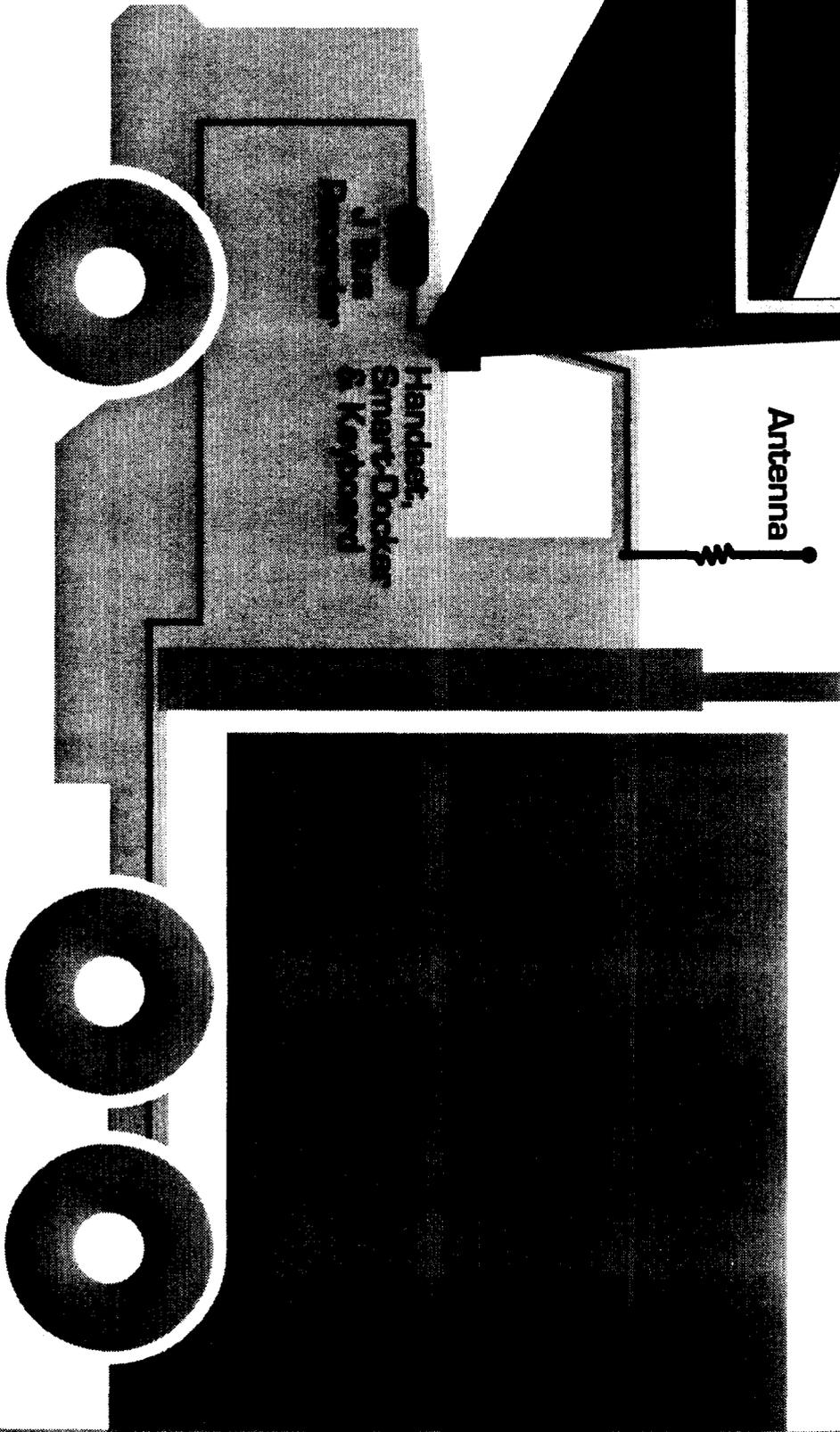
In-Truck Equipment



Antenna



Handset,
Smart-Docker
& Keyboard
Recorder



TRX TransTel

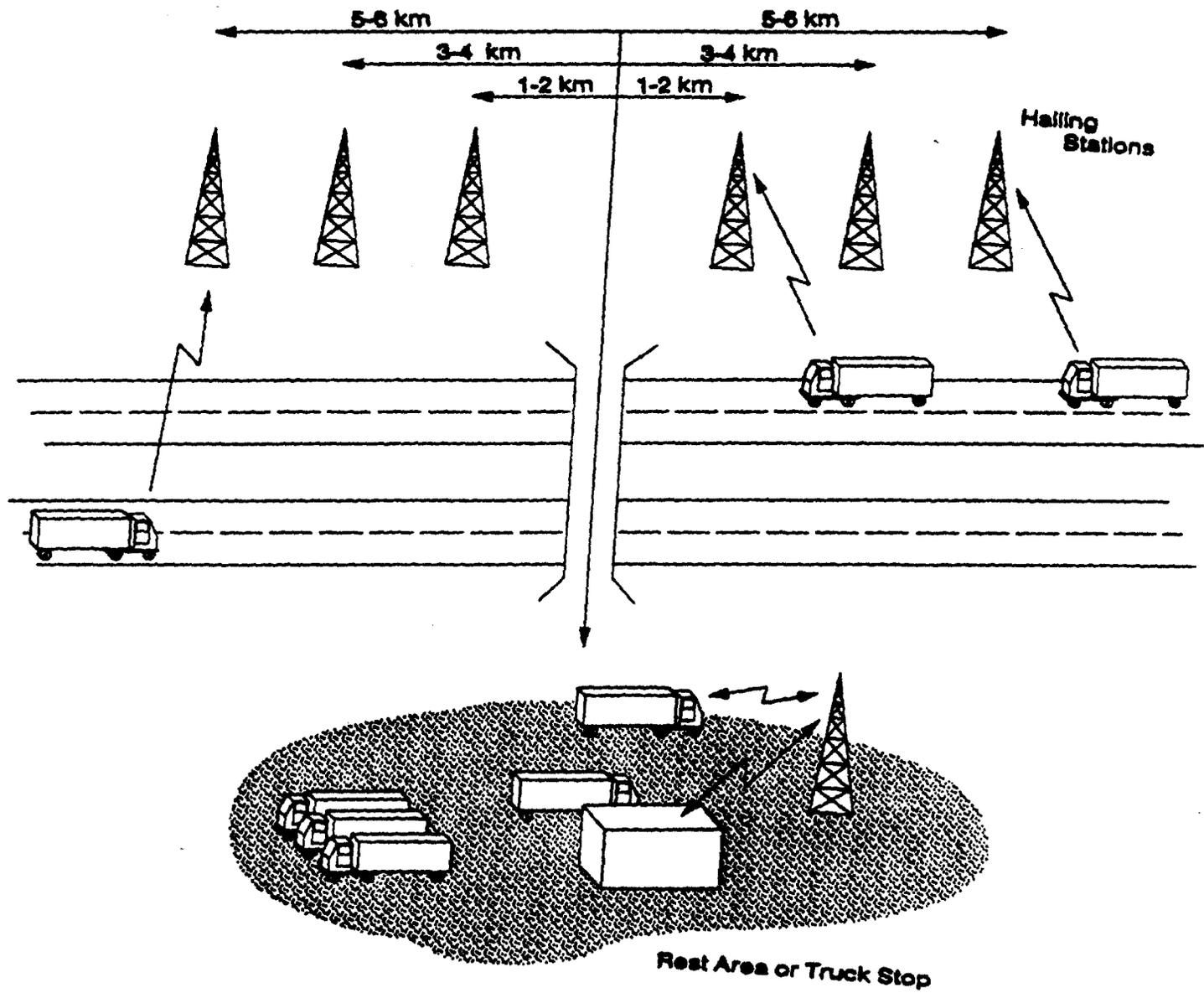
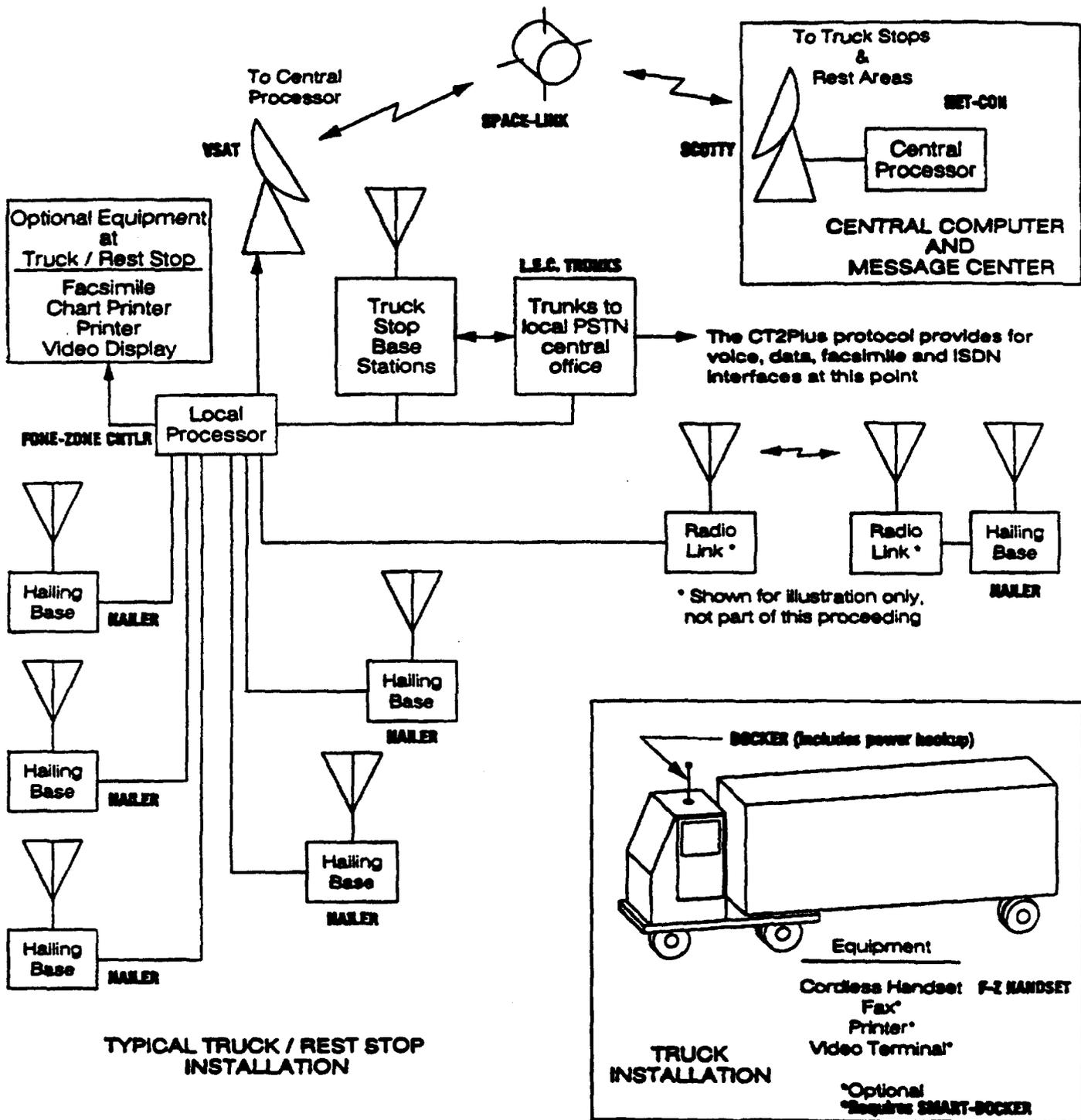


Figure 1 - System Conceptual Diagram

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TRX TransTel



BOLD TYPEFACE REPRESENTS TRX TransTel COMPONENT AND SYSTEM IDENTIFIERS

Figure 2 - System Block Diagram

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