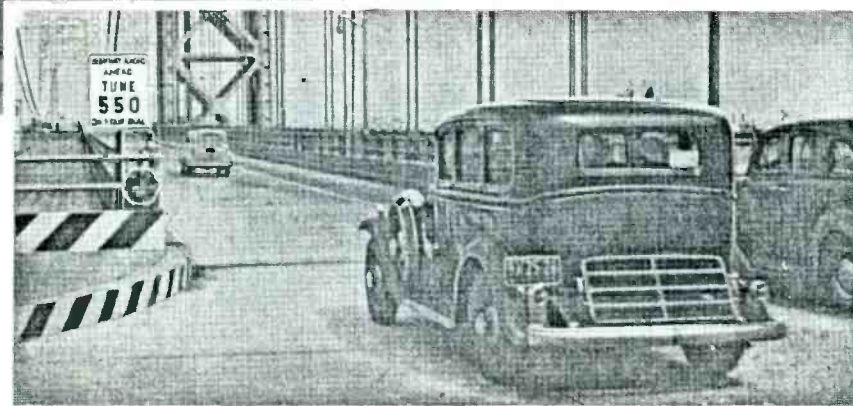


Can You Monitor These Mini-Broadcasters?

Little Known DX Challenge Awaits Adventuresome Listeners!

BY "SMOKI" WHITFIELD

In the original roadside broadcasting experiment of the late 1930s, a low-power transmitter was established on the George Washington Bridge to help motorists find the right road to take for the New York World's Fair.



Motorists seeking the World's Fair were instructed to tune their car radios to 550 kHz in order to hear the mini-broadcaster.

From time to time, DX club newsletters note that a listener has snagged a so-called Travelers Information Station (TIS). Much of the time, members see the listing and shrug it off as a harmonic or an error. Fact is that these mini-broadcasters (mostly running 10 watts) offer an exciting and little known DX challenge to anybody with a standard AM broadcast receiver.

These stations presently operate on two channels, 530 kHz (just below the low frequency edge of the standard AM broadcast band) and 1610 kHz (above the high frequency edge of the band). Their purpose is to advise motorists of local conditions that will be of interest to them; and, despite their low power, they have been picked up from over hundreds of miles away when DX conditions are right. Somehow, however, all of this remains virtually unknown to DX enthusiasts. I've spent a bit of time collecting information on TIS and I felt that I'd share what information I have with other DX'ers in the hope that they can pioneer an almost unexplored area of the hobby.

Going Back

TIS is nothing new. It goes back to the 1930s in one form or another, which makes it all the more surprising that it has remained so obscure to listeners.

Developed originally by the Halstead

Traffic Communications Corp., the first TIS installation was created in conjunction with the 1939 World's Fair in New York. The station was located on the George Washington Bridge, which connects New Jersey to New York City across the Hudson River. The idea was to guide out of town motorists to the proper bridge exits leading to the World's Fair. At the approach to the bridge, a driver would see a sign reading "Highway Radio Ahead, Tune 550 on your dial." The motorist, tuning the car radio accordingly, would hear a repeating recording with the information. The recording was made on a magnetic tape and could be changed at any time. The antenna for this station stretched the entire length of the bridge.

Modifications and improvements in this system were used by the armed forces during World War II. After the war, a similar system was established to provide information to vehicles going through the Holland Tunnel, another traffic artery connecting New York City and New Jersey.

The Current Scene

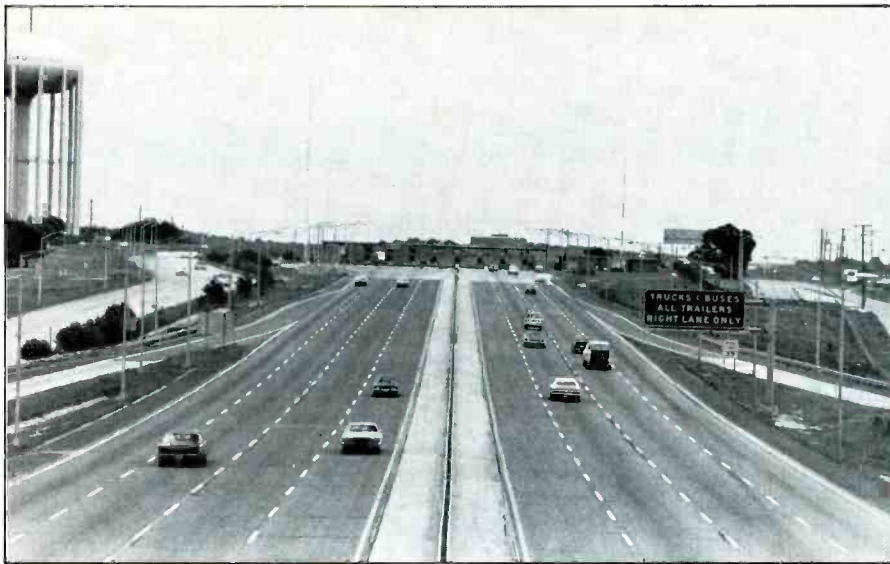
TIS operations are covered in FCC Regulations under Section 90.242. These regulations specify that stations must be licensed in the Local Government Radio Service, cannot interfere with broadcast stations operating on adjacent frequencies, and the trans-

mitting site must be located in the vicinity of transportation terminals (air, train and bus), public parks and historical sites, bridges, tunnels, and at intersections of Federal Interstate Highways with other roads. Transmissions must be non-commercial in nature and should relate only to traffic and road conditions, traffic hazard and travel advisories, directions, availability of lodging, rest stops and service stations, and descriptions of local points of interest.

A maximum power of 50 watts may be used by stations having a cable antenna, with an antenna length of slightly less than two miles. Power and antenna length, however, must be adjusted so that the actual radiated signal strength is relatively low (not exceeding 2 microvolts per meter when measured at 197 feet from the antenna). This means that stations with long antennas will be running lower power than those with shorter antennas.

Stations using a conventional radiating antenna can't exceed 10 watts into a vertical monopole or directional array, and the antenna can't exceed 49 feet above ground level. These parameters may be reduced to make certain that the signal strength doesn't exceed 2 microvolts per meter at slightly less than a mile from the antenna.

It does appear that the FCC is willing to grant some variances to these regulations upon the showing of a need for uses or tech-



The Tennessee State Highway Department keeps motorists advised about major construction projects by means of TIS stations.



These days motorists can hear TIS stations warning them of construction delays and offering advice on where to park at airports.



Many TIS transmitters are portable and can be quickly set up at sites of accidents to warn approaching drivers of the best detours around the site.

nical standards not included in the rules, hence some stations licensed under experimental authorizations. Since federal stations (at national parks, etc.) are not licensed by the FCC, it is not clear if they are required to adhere to FCC regulations, although certainly they would most likely be operating within the spirit of those tenets.

These days, TIS transmitters provide many services. Experimental TIS station KQ2XUB, for example, operates on 530 kHz at the Los Angeles Airport. Operating from 7 AM to 11 PM (local time), KQ2XUB advises arriving vehicles of parking availability at the airport. Other stations at different airports known to be providing similar broadcasts include KON247, WXK790, KI2XDR, and another station (callsign unknown) at the Cincinnati Airport.

Station KMB824 is used to let motorists on the Chicago Expressway know where the construction tieups are located. Other stations providing similar info in different areas include KMH441 and WXW950. Station WQF465 advises visitors to the campus of Ohio State University where to park and provides additional campus information.

Station KID774, located at Gettysburg National Military Park by the National Park Service, gives arriving visitors information on parking, facilities, and things to see. Actually, it seems that TIS units may well be operating at most major facilities under the jurisdiction of the National Park Service, al-

though the list provided here shows only a few such installations reported by DX enthusiasts. In fact, the listing I've provided along with this story is most likely incomplete to a great degree and shows only those stations I've monitored myself or ones I've noted as having been monitored by others. That being the case, I'd greatly appreciate additional listings to be forwarded to me in care of POP'COMM so that I can, in the future, compile a more complete listing for all readers to use.

Monitoring Thoughts

The best time to listen for DX would be at night. However, there's no guarantee that you'll hear anything without difficulty. You have to keep checking the frequencies—sometimes you just get lucky. At times you can hear several stations babbling away, and it's a trick to separate what they are saying and try to identify them.

The lower of the two TIS frequencies, 530

Travelers Information Service

State	Callsign	Location	Licensee	Watts	kHz
AZ	WXK790	Phoenix	City of Phoenix	10	1610
CA	KQ2XUB	Los Angeles Airpt.	City of L. A.	10	530
CO		Curecanti Rec. Area			1610
IL	KMB824	Chicago X-way	State of Ill.	10	1610
IL	KMH441	Highland Park	State of Ill.	10	1610
IA	KI2XCL	Davenport	State of Ia.	10	1610
IA	KJJ386	Davenport	State of Ia.	10	1610
IA	KI2XCM	Walnut	State of Ia.	10	1610
MN	KI2XDR	Minn/St. Paul Apt.	State of Minn.	20	530
MT		Yellowstone Park	Nat. Pk. Svc		1610
OH		Cincinnati Apt.			1610
OH	WQF465	Columbus	State Univ.	10	530
OK	WYG289	Tulsa	City of Tulsa	10	530
PA	KID774	Gettysburg	Nat. Pk. Svc.		1610
TN		Gatlinburg			530
TN	WXW950	Knoxville	State Hwy. Dept.		530
TX	KON247	Houston Airport		10	1610
WA		Mt. Ranier	Nat. Pk. Svc		1610
WA		Naches	Nat. Pk. Svc.		1610
WY		Devils Tower	Nat. Pk. Svc.		1610

kHz, it should be noted, can also offer some misleading signals, although they are nonetheless fascinating. It seems that some drive-in theatres use 530 kHz (and 540 kHz) to transmit the sound tracks of their films to the vehicles attending the showing. If you know of any of these, please send their names and frequencies to me and I'll include them in the listing I'm compiling for POP'COMM. One such drive-in theatre is in Bayshore, NY and it utilizes 530 kHz and 540 kHz.

The 1610 kHz frequency also has its own fascinations. A "dead carrier" sometimes heard here turned out to be a 100 watt experimental station (KK2XBS) operated by Lawrence Beir Associates in Greenville, North Carolina. What you are more than likely to monitor here in the evenings is a 15 kW religious broadcaster called "The Caribbean Beacon," which is located on the island of Anguilla in the West Indies. Although a nice DX catch in itself, it will cover over any of the feeble TIS signals you might otherwise hear. This station operates from 2200 to 0500 GMT and after that the frequency is reasonably clear.

A radiobeacon station in Colombia (South America) has been monitored on 1610 kHz by a few listeners. This station, using the ID "TDA," is located in the city of Trinidad and normally operates limited hours rather than continuously.

The general operation of a TIS station has not changed much from the very first experimental one used in 1939. A tape recording is made with the information, and since it is on a repeating loop, it continually gives its message. At such times as the information status changes, a new tape is made and placed on the air. This, indeed, is very similar to the Automatic Terminal Information Stations (ATIS) found operating in the VHF aero band at most airports in order to give a capsulized picture of weather and runway conditions to pilots.

Take A Listen

Give both of these frequencies a listen and see what you can come up with. I've given you enough information here to get you started and if you are willing to send in any data on 530/1610 kHz operations we can cook up a really good and usable monitoring guide for all to keep handy. As far as I know, nothing of that type has ever been compiled.

Moreover, here's a chance for you to zero in on some interesting DX stations that offer a unique challenge—low power mini-broadcasters! Who knows, maybe somebody can be the first to QSL a TIS station! Any readers who furnish listings or additional info on TIS operations (or a photocopy of a TIS QSL card or letter) will be given full credit in any future stories POP'COMM runs containing that information. Here's your chance for fame and glory; more than that, a chance to contribute useful research in the cause of better DX monitoring!

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