ViotsiH o

... about the CHESTERFIELD RADIO PROGRAM



NINO MARTINI

LILY PONS

LIGGETT & MYERS TOBACCO CO.

ANDRE KOSTELANETZ The program is performed . . . in a sound-proof studio or broadcasting theatre

Most radio programs come to you from studios, which are made of special materials so as to be sound-proof and air-tight; right outside the door of a closed studio you cannot hear a single instrument even when a full band is playing inside.

Studios are of different sizes and shapes, to suit different kinds of programs. The demand for tickets for certain programs is so great, however, that regular theatres have been made over for broadcasting.



A Columbia studio in New York. Notice the microphone hanging in left foreground.

Hearing the Chesterfield program, for instance, is like going to a big Broadway show. The singers, Lily Pons and Nino Martini, are popular not only among radio fans but with New York's music-loving and opera-going public, as well as with movie audiences. So although the Columbia Playhouse, where Chesterfield programs are staged, is large enough to seat nearly twelve hundred people, the last arrivals before the doors close may find "standing room only."



Audience listening to Chesterfield program in the Columbia Playhouse in New York.

2 The sound waves enter "mikes," come out as electric waves, and go by wire to the Studio Control Room

The singers or announcers or actors, as they perform, stand near microphones—and other microphones pick up the music from the orchestra. In the theatre the "mikes"—three or four of them—are set on the stage where needed, each being connected by wire with the Control Room; and another is hung out over the audience.



Glass-enclosed Studio Control Room, with engineer at the dials watching performers and regulating volume.

Microphones, as you know, are something like the mouthpiece part of your telephone, but are extremely sensitive; every sound is picked up and instantly changed to electric impulses or "waves." The studio engineer can regulate the amount of sound you hear—can turn a whisper into a roar like Niagara. Some of the "sound effects" used in radio programs are very ingenious, too.



Section of switch-board in the Master Control Room-the heart of a national network.

Before "going on the air," all programs are rehearsed and clocked, both to give you a smoother performance and to be sure the different numbers or features take just the scheduled time. ... where they are blended for volume — made softer or louder.
Then to the Master Control Room

In the Studio Control Room (or in the glass-enclosed box in the theatre) engineers "mix" the sounds which come through the different microphones. They can hear the program, through speakers, exactly as it is being heard that very second in millions of homes; and can signal the conductor or artist if necessary, for more volume or less.

Each studio or theatre control room is directly connected by wire with the Master Control Room, where each program is instantly received as produced. 4 ... where they are routed out on schedule, through a maze of wires, to stations, all across the country

The Master Control Room is connected with every studio and every station of the network—thousands and thousands of miles of wire. Each program is "amplified" (made stronger) here, and sent out on split-second timing to just the right stations at the right time.

The map below shows the network of stations which regularly receive the Chesterfield program, and the time zones in which each is located. You probably will hear it from the station nearest you.

> WJR OKLA. OKLAHOMA CITY TULSA

KOMA KTUL



Coast-to-coast Network over which Chesterfield Broadcasts

						MILV.V.	MINNEAPOLIS	" LLU			
ALA.	BIRMINGHAM	WBRC	HAWAH	HONOLULU	KGMB	MO.	KANSAS CITY	KMBC	ORE.	PORTLAND	KOIN WHP
	MONTGOMERY	WSFA	ILL.	CHICAGO PEORIA	WBBM WMBD	NEB.	LINCOLN	KEAB		PHILADELPHIA	WLAS
ARK.	LITTLE ROCK	KLRA	IND	FORT WAYNE	WOWO	NEV.	RENO	KOH R.	R. I.	PROVIDENCE	WEAN
CAL.	BAKERSFIELD	KERN		INDIANAPOLIS	WFBM	N. H.	MANCHESTER	WFEA	S. D.	YANKTON	WNAX
	LOS ANGELES	KHI	KANS.	DAVENPORT	WOC KRNT KSCJ	N. J.	ATLANTIC CITY ALBANY BINGHAMTON BUFFALO NEW YORK ROCHESTER	WPG	WPG TENN. VOKO WNBF KBW WABC TEX.	CHATTANOOGA	WDOD
	SACRAMENTO SAN DIEGO	KFBK KGB		DES MOINES SIOUX CITY		N.Y. B B N F		WOKO WNBF WKBW WABC WHEC		KNOXVILLE MEMPHIS NASHVILLE	W NOX WREC WI AC
	SAN FRANCISCO SANTA BARBARA STOCKTON	KFRC KDB KWG		TOPEKA WICHITA	WIBW KFH					DALLAS	KRLD KTRH
COI.0.	DENVER	KLZ	KY.	LOUISVILLE	WHAS		SYRACUSE	WFBL		SAN ANTONIO	KTSA
CONN.	BRIDGEPORT HARTFORD	WICC WDRC	LA.	NEW ORLEANS NEW ORLEANS	WDSU# WWL†	N. C.	CHARLOTTE	WBT		WICHITA FALLS	KGKO
D. C.	WASHINGTON	WJSV		SHREVEPORT	KWKH		GREENSBORO	WDNC	UTAH	SALT LAKE CITY	KSL
FLA.	JACKSONVILLE	WMBR	ME.	BANGOR	WLBZ		WINSTON SALEM	WSIS	VA.	RICHMOND	WMBG
	MIAMI	WQAM	MD.	BALTIMORE	WCAO	01110	AKRON	WADC		ROANOKE	W DBJ
	PENSACOLA TAMPA	WCOA WDAE	MASS.	BOSTON SPRINGFIELD	WNAC WMAS		CINCINNATI CLEVELAND COLUMBUS	WKRC WHK WBNS	WASH.	TACOMA SEATTLE SPOKANE	KOL KFPY
GA.	ATLANTA SAVANNAH	WGST WTOC	*Until N	ov. 1st †Starti	ng Nov. 1st		DAYTON TOLEDO	WSMK WSPD	WIS.	LACROSSE MILWAUKEE	WKBH WISN

MICH. DETROIT

dio History

How the Chesterfield Program comes to your home from the stage of a New York theatre

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Each broadcasting station changes electrical waves to radio waves, and broadcasts them out into space

The power of the waves received from control rooms is greatly magnified (ten million times at the Wayne transmitter!), changed through huge vacuum tubes to "radio frequency energy," and sent out through the air by the antenna or mast. And now the program is truly "on the air."

625-foot transmitter tower of Station WABC at Wayne, N. J.



• Your home aerial picks up the waves, and your radio set changes them back into sound waves

By twisting your dial, you "tune in" your program and "tune out" all waves of different frequencies.

In your set, tiny radio waves pass through amplifier and detector, the "carrier waves" are sifted out, and the electrical waves are turned into sound waves — the only kind our ears can hear.

And if your antenna or aerial is in good condition, and your tubes likewise, you'll hear every note of music, every word, exactly as it is played or sung or spoken.

From perhaps thousands of miles away, you can hear the Chesterfield program produced on the stage of a sound-proof New York theatre.

I ... which you hear as the voice of Lily Pons or Nino Martini or the music of Kostelanetz's Orchestra



And all this happens so fast that even 3000 miles away, you're hearing the program before it reaches the rear seats of the theatre!

It's a fact. Sound waves travel about 12 miles a minute . . . electrical waves more than 11 *million* miles a minute. Even at the South Pole, or down in Mammoth Cave, you'd hear the program by radio quicker than some one a hundred feet away from the stage!

If you're coming to New York, ask one of our representatives about tickets; we think you would enjoy seeing and hearing our artists in person. But if not, just tune in, some Wednesday or Saturday evening; and as you sit comfortably at home, think of all the men and equipment and marvels of science that bring about this modern miracle.

Try it . . . and try Chesterfield Cigarettes too. We believe you'll enjoy both.

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for MILDNESS for BETTER TASTE