INSIDETV

MR. WIZARD MAKES A RETURN ON CABLE

By LEE MARGULIES, Times Staff Writer

ot all the kiddie show hosts from television's early days have faded away. Tom Hatten still hosts a "Popeye" cartoon series for KTLA Channel 5, Fran Allison of "Kukla, Fran and Ollie" is hosting a weekly series for senior citizens on KHJ-TV Channel 9, and now Mr. Wizard is coming back, too.

Don Herbert, who played Mr. Wizard in the young people's science series on NBC from 1951 until 1964, will be resurrecting the character again this fall in a weekly series for Nickelodeon, the cable-TV channel for children.

Herbert will be taping 26 half-hour episodes of "Mr. Wizard's World," which he said will utilize a magazine format to cover a variety of topics about "the whole world of science as seen through the eyes of a professional amateur."

The series will be aimed at children in the 9-to-11 age range but will run in the early evening to facilitate viewing by parents too, since Herbert's clear, incisive explanations of complicated phenomenon always have had great appeal to many adults.

Since "Mr. Wizard" left the air, Herbert has remained busy in a variety of activities, producing educational films, writing a book and occasionally foraying back into television as Mr. Wizard—first in a revival of the old show in 1971 and later as a regular on a CBS-children's magazine series called "Razzmatazz."

For the past four years he has produced a series of 80-second science news inserts called "How About," which are funded by the National Science Foundation and General Motors and are used on news and information programs at about 110 stations around the country.

Herbert, 65, who lives in Canoga Park, said the new series will differ from the old one in that instead of devoting a full half an hour to a single theme, it will be divided into segments covering subjects such as the human body, new discoveries in science, how things work and lab experiments. There will be three sets: a kitchen, a work room and a den that will be equipped with a computer.

"It's going to move (quickly), and it's going to be different," he said, "but it will still retain the essence of the old show, which was having fun finding out about stuff in the world around you."

Dr. Maynard:

Please call me at my home/office # (805) 947if there are corrections to this draft script. We will credit Penn State in the show's closing credit titles. Thank you for your interest and help on this fascinating story.

. 1 MWW-Mapping a Guitar-3:30	April 27, 1983 36 SAF 007060 P.1
2	
3 OIDUTE STUDIO	COMMENTARY
4 DON WITH GUITAR	
	MW (ON CAMERA) The guitar. Even though your
	favorite music groups have made new sounds with
	it, this instrument has been around since the 16th
마 8이 존속화한 밤이 이 생활하셨다니다.	century. And for all that time, nobody knew
	exactly why it sounded like a guitar.
11	Now, you probably know that vibration makes sound.
- 12 The Control of t	When I strum the strings, you can see they're
	vibrating-back and forth
	But lots of musical instruments have strings,
- 16	and they don't sound like guitars.
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	(VO): To find out why a guitar sounds like a
19	guitar, scientists at Pennsylvania State
20	University invented a new process called Nearfield
21 Penn State Videotape	Acoustic Holography.
22 SOURCE TAPE: TO BE	
23 TRANSFERRED	
- 24	A grid of wires is suspended above the floor over
25:	a guitar.
2 6	
27	Hanging from the grid are 256 sensitive
28]	microphones, like this one.
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30	The room itself is designed like a sound studio.
31	Its walls, floor, and ceiling are covered with
32	special materials to absorb sound.
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34 Is it Dr. Williams	Dr. Eärl Williams, makes final adjustments on the
on camera in the acoustic room?	guitar. He invented this new system, along with
36	Dr. Julian Maynard.
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38	The guitar is sitting on a platform, a few inches

under the microphones.

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29 30 Further position adjustments can be made by remote control. As this motor turns...it turns a screw shaft...which moves the table in relation to the microphones.

A special vibrating device starts one of the strings vibrating, producing a typical guitar sound.

The sound goes out in all directions, so the more microphones pick it up, the more information is recorded on which direction the sound came from.

The signals from all the microphones go into this console.

The Penn State scientists developed a computer program, that displays how much sound was received by each of the 256 microphones.

The map shows that most of the sound came from the opening under the strings.

Sound also came from the section near the bridge.

Some also came from the neck, a finding that was surprising to many experts.

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16 17 This work also led to the discovery that the back of the guitar acts something like bellows to push

sound out through the opening.

Nearfield Acoustic Holography can be used to map other instruments, to learn how to design them for better, more pleasing sounds.

And sounds of machines, even car engines, can be mapped to locate where the engine noise comes from. The result could be quieter engines.

So after more than 500 years of use, scientists Know know why a guitar sounds like a guitar...because they've mapped its sounds.