

**CALL LETTERS** for frequency modulation stations are to be changed to bring them into line with the regular 4-letter calls used by AM broadcasting stations, according to a recent report by the Federal Communications Commission. The new system will come into effect November 1.

This system of call letters for FM stations will replace the present combination of letter numeral calls (such as W47NY, W51R, etc.) presently used by FM broadcasters. In cases where a licensee of an FM station also operates a standard broadcast station in the same city, he may, if he so desires, retain his standard call letter assignment followed by the suffix "FM" to designate broadcasting on the FM band. Thus, if the licensee of a standard broadcast station with the call letters "WAAX" (hypothetical), also operates an FM station in the same location, he will have the choice of using the call "WAAX-FM" or he may, on the other hand, be assigned a new four-letter call—say, WXRI. Similarly, an FM broadcaster on the West Coast, who also operates a standard broadcast station "KQO," may, if he likes, use the call "KQO-FM" or he may asked for a new four-letter call "KQOF" for his FM station. This choice will remain entirely with the FM operator.

Urged by FM Broadcasters, Inc., which had petitioned the Commission for a change, the new procedure will immediately affect some 45 FM stations now in operation, as well as all future licensees. Existing licensees have been instructed to select their new calls prior to Oct. 1 from the list available at the FCC of some 4000 four-letter unassigned calls.

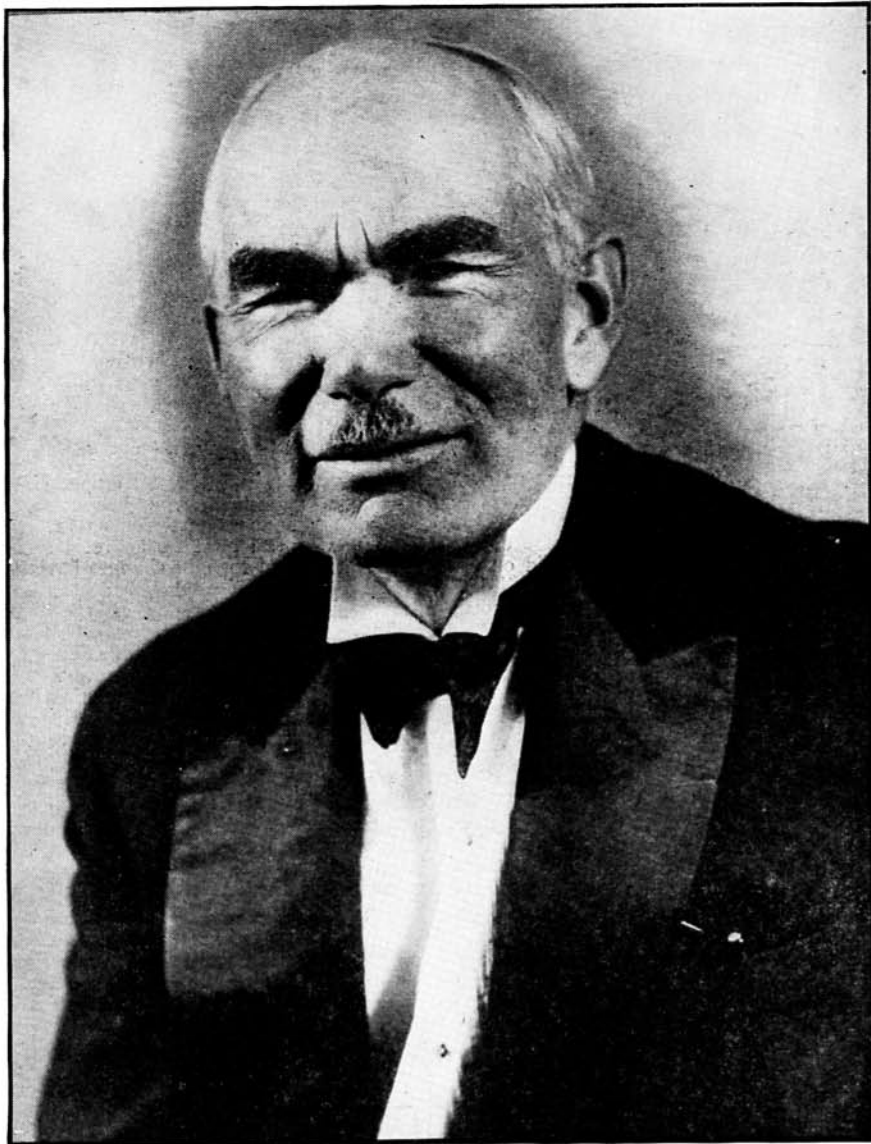
If no request has been received from an FM licensee by Oct. 1, the FCC will, at its discretion, assign a new four-letter call to that station. It is recommended that FM operators who wish a new four-letter call list their first, second and third choices, and in the event two stations seek identical call letters the request first received by the Commission will be honored.

Under the existing system the first letter of an FM call, either K or W, indicated the geographical position of the station in relation to the Mississippi River, the number designation showed the frequency on which that station was operating and the last letter or letters gave a clue to the city from which the broadcast emanated. (FM stations are licensed in the 43,000 to 50,000 kilocycle band, on frequencies from 43,100 to 49,900 Kc., progressing by 200 kilocycle steps.) Thus the call K37LA indicates a station operating on 43,700 Kc. at Los Angeles; W53D, a station on 45,300 Kc. at Detroit, etc.

The Commission's decision to discard the combination of letter-numeral calls for FM stations arose out of several disadvantages and inherent limitations in the system based upon the past experience of FM broadcasters themselves, and the advisability of making the change while transmitter construction is halted because of the war.

Licensees of FM stations have found that the letter-numeral system is cumbersome and does not meet with general public acceptance. In addition, a change in frequency of an FM station under the old system involved a change in its call with consequent confusion to the listening public.

Finally, it was felt that as FM stations were licensed in more and more cities, it would become increasingly difficult to identify the station call with a particular city through the use of an initial letter or letters, as if call signs were allotted to two cities with the same initial letter there would be no means of distinguishing between them.



Underwood and Underwood

**D R. LEE DEFOREST**, the Father of Radio, celebrated his 70th birthday in the quiet of his Los Angeles home on August 26.

Dr. DeForest is still actively engaged in electronic research and development. His latest field is that of Radiotherapy, and some of his conclusions, presented in a recent *Radio-Craft* article, are at variance with the traditional concept that all effects of high-frequency current on the human system are due to heating.

The ability to think ahead of the crowd which has always marked his career is still his most distinguished characteristic. Nor is it confined to his researches in ultra-high-frequency physiotherapy. He is said to be currently working on a new military application of the electron tube, in which television and robot plane control will be so combined that an explosive-laden plane—a literal flying torpedo—can be directed unerringly to a distant target.

Celebrated as the inventor of the three-element electron tube upon which all radio development since its time has been based, his accomplishments in the field of broadcasting and related activities have often been overlooked. Yet he originated successful broadcasts at a time when the man in the street neither knew nor would have believed such a thing to be possible. His first successful tests were made in the summer of 1908, from the Eiffel Tower in

Paris. Beside initiating broadcasting, another tradition (which has been faithfully adhered to since) was established the first night the Tower station went on the air. The program consisted of *phonograph records*, which were received well by a number of French military radio stations near Paris. While DeForest was still enjoying his triumph, a letter was received from an engineer in Marseilles, confirming reception of every number. The name of the first DX listener has been lost, but he was the founder of a great fraternity.

In early 1910 the experiment was repeated in New York City. More than 50 people were said to have listened to America's original radio program.

Another "first" of DeForest's has remained with the radio constructor and experimenter through all the years since. It came from his work on the Audion in the old New York laboratory. DeForest found some difficulties in directing his two assistants in an experiment which called for the rapid change of a number of circuit connections. There was a certain confusion as to which should go where, and the inventor stopped for a minute to clear it up. "Put the green wire on the grid and the black on the ground," he said. "Write it on the wall somewhere so you won't forget. Green to grid, *always*, and black to ground!"

And green to grid, black to ground it has been to the present day!