

## Bendix TV in President's Plane

The many hardy souls who had the tenacity to "stick with" the political conventions by television saw President Truman when he arrived in Chicago in his plane, the "Independence". They saw him land and heard him remark about having watched his take-off and landing on a television receiver installed in the plane and heard him express his belief that he was the first person to have had such an experience. The President also indicated his enjoyment in having observed the convention proceedings while in flight. The television receiver in the aircraft was a Bendix 21T3.

The story of how this came about is one of coincidence, perseverance, ingenuity, and a lot of hard work under pressure. It seems that President Truman decided, the day before he was to leave, that he would like to watch the Democratic Convention as he flew to Chicago. The Chief Pilot generally discouraged the idea but called Mr. Frank White of the Air Transport Association to obtain his opinion if a set could be installed in the plane in the time available.

The telephone call was received by Mr. White while he was attending an R.T.C.A. meeting which, coincidentally, Mr. D.M. Heller, Chief Engineer, Department 62 was also attending. Mr. White asked Mr. Heller if Bendix would be interested in attempting to put television on the "Independence" and a call to Mr. Omberg at the Towson plant started the ball rolling. George Wofford, of Department 66, and Bill Rivers, of Department 88, took two receivers to Washington and C.M. Sanford, of Department 62, took off to Harbor Field to get hold of an inverter which produces 60 cycle AC from a DC supply.

The second coincidence occurred while an attempt was being made to locate a suitable antenna. Mr. Heller learned that Capital Airlines had made a television installation on one of their planes and a search was instituted for one of the special antennas used at that time. Instead of taking a cab to the warehouse a Capital Airlines truck was used and the truck driver, upon hearing the problem, disclosed that the antenna in question was reposing in his cellar, having been scrapped by the company.

Many difficulties were overcome while making the installation. It was found that the smaller of the two cabinets was too large to pass through the doorway of the plane. The chassis was removed from the cabinet, a piece 3-5/8 inches long was sawed off the back end of the cabinet, reinstallation of the chassis in the cabinet was made inside the plane, and the sawed piece of the cabinet was nailed back on. The set was shock-mounted on a piece of plywood which was bolted on top of a filing cabinet. A section of the belly of the plane was reinforced to accommodate the single dipole antenna which was mounted on a plate riveted to the fuselage, and the installation and wiring of the inverter completed the job. Messrs. Heller, Sanford, Wofford, and Rivers, and other non-Bendix people, worked on this project from 3 P.M. to 1. A.M.

The "Independence" is, of course, loaded with navigation, radar, and indicating equipment and the pilot was worried about the effect of the television and inverter on this gear. Therefore, the plane was taxied out on the runway for a test. Reception was remarkably good---in fact, all three Baltimore stations were "picked up"---and there was no adverse effect on the equipment in the plane. The next day while the plane was on its way, a message was received at Towson that the set was behaving perfectly and the passengers were watching television constantly and were intensely interested. Mr. Heller reports that all who came in contact with this operation, which very easily could have been pronounced not feasible, were favorably impressed with Bendix' products and Bendix' ability to tackle a problem.

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