

ORIGINAL

FORM NO. 100

100

Answers to the questions from FCC on HDTV standards.

5. CHANNEL AUGMENTATIONS

Current channel bandwidth in NTSC standard is limited within 6MHz, which is sufficient to broadcasting of the EDTV. The channel bandwidth for HDTV signal transmission should be at least 9MHz. In order to transmit the picture signals appropriately, the phase characteristic should also be guaranteed or specified. The pass-band of the signal should therefore have more than 8.1MHz. The performance is proven excellent through the experiment of Washington, D. C. in the beginning of this year. In order to acquire the band, two contiguous channel should be assigned for the particular HDTV channel(s). The current UHF terrestrial broadcasting channel has 6MHz band. The most adequate channel bandwidth for the HDTV signal channel as a result, is 12MHz, which is two channel bandwidth of the current NTSC channel.

5. UHF ONLY OR BOTH UHF AND VHF

A HDTV signal requires very high level of transmission quality. A ghost

11. ADVANTAGES AND DISADVANTAGES OF THE FREQUENCY ALLOCATION

Compared to the system cost, the cost for the receiving portion is much less than that of the whole cost. There seems no significant differences between them. When the frequency assignment of the Broadcasting is in the SHF DBS band, the only items we have to consider is the cost increased by the antenna size to keep pictures beautiful against the rain attenuation.

12. HOW WELL COMPARED?

At this time Japanese are trying to have DBS HDTV services through the