

# CERTIFIED MAIL-RETURN RECEIPT REQUESTED

September 3, 2010

(Name withheld)  
(Address withheld)  
(Address withheld)

**RE: Radio frequency interference  
EB-10-GB-0105**

Dear Mr. & Mrs. (name withheld):

The Federal Communications Commission has received a complaint that an electrical device, possibly a faulty doorbell transformer, apparently in your home may be causing harmful radio interference to an operator in the Amateur Radio Service. The complainant is:

(Name withheld)  
(Address withheld)  
(Address withheld)

The Commission has the responsibility to require that such problems be rectified within a reasonable time if the interference is caused by faulty consumer equipment. Under FCC rules, certain types of equipment are classified as "incidental radiators." These devices do not intentionally generate any radio-frequency energy, but that may create such energy as an incidental part of its intended operation. Common examples are faulty doorbell transformers, aquarium heaters, fluorescent light ballasts, doorbell control circuits and so forth.

Other types of consumer devices are classified as "unintentional radiators." These devices generate radio frequency energy but do not intentionally radiate it. Some common examples include computers, radio receivers and television sets. Some of these devices are imported and do not comply with Commission certification standards, and thereby result in interference to other radio services. If the source of the interference is an unintentional radiator, you may have one of these devices. If the device is an approved one, it should have a silver FCC label on the unit showing a certification number. **Even an approved device, however, can only be operated legally if it is *not* causing harmful interference to a licensed radio service. Both incidental and unintentional radiators can also be defective resulting in a shock or fire hazard.**

To help you better understand your responsibilities under FCC rules, here are the most important rules relating to radio and television interference from incidental radiators:

## **Title 47, CFR Section 15.5 General conditions of operation.**

(b) Operation of an intentional, unintentional, or incidental radiator is subject to the conditions that no harmful interference is caused and that interference must be accepted that may be caused

by the operation of an authorized radio station, by another intentional or unintentional radiator, by industrial, scientific and medical (ISM) equipment, or by an incidental radiator.

(c) The operator of the radio frequency device shall be required to cease operating the device upon notification by a Commission representative that the device is causing harmful interference. Operation shall not resume until the condition causing the harmful interference has been corrected.

**Title 47, CFR Section 15.13 Incidental radiators.**

Manufacturers of these devices shall employ good engineering practices to minimize the risk of harmful interference.

**Title 47, CFR Section 15.15 General technical requirements.**

(c) Parties responsible for equipment compliance should note that the limits specified in this part will not prevent harmful interference under all circumstances. Since the operators of Part 15 devices are required to cease operation should harmful interference occur to authorized users of the radio frequency spectrum, the parties responsible for equipment compliance are encouraged to employ the minimum field strength necessary for communications, to provide greater attenuation of unwanted emissions than required by these regulations, and to advise the user as to how to resolve harmful interference problems (for example, see Sec. 15.105(b)).

The complainant has attempted unsuccessfully to resolve this problem and as a result the matter has been referred to our office. The Commission prefers that those responsible for the proper operation of equipment assume their responsibilities fairly. This means that you should resolve the interference caused by the device and make necessary corrections within a reasonable time.

While the Commission has confidence that most people are able to resolve these issues voluntarily, the Commission wants to make you aware that this unresolved problem may be a violation of FCC rules and could result in a monetary forfeiture (fine) for each occurrence. At this stage, the FCC encourages the parties to resolve this problem without Commission intervention; but if necessary to facilitate resolution, the Commission may investigate possible rules violations and address appropriate remedies.

Please advise this office and (name withheld) as to what steps you are taking to correct this reported interference problem. The Commission expects that most cases can be resolved within 30 days of the time they are first reported. Please feel free to contact me in writing at: 1270 Fairfield Road, Gettysburg, PA 17325 or via telephone at 717-338-2577 if you have any questions about this matter.

Sincerely,

Laura L. Smith, Esq.  
Special Counsel  
Enforcement Bureau

cc: Denver Field Office  
Western Regional Director