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channel and so leads to a dissipation of space charge from the environment of the jets but an immediate increase of ionization along its path. Following the passage of the phenomenon, ionization will decay by recombination.

3. Nearby Air or Other Craft

All metallic aircraft which are struck by true lightning generally have scorch marks, pits, or holes burned through the skin. The holes rarely exceed one inch in diameter. (See Bulletin, Technical Note 10611). Portions of non-metallic material in contact with the area struck may be burnt or explosively separated from the metal to which the material is attached. When radio antennas are struck or the lightning arrester does not function as desired, damage to radio equipment often occurs.

Temporary blinding of pilots looking directly at the flash due to the stroke to some anterior portion of the aircraft such as the nose or the fuselage may introduce some hazard. As a rule the temporary blinding is effective from about 10 seconds to a larger fraction of a minute, but in one instance some a pilot was reported to have been temporarily blinded for about 4 minutes. Several cases of temporary blinding of about 3 minutes have been reported.

The Weather Bureau has not received any reports of accidents in which an airplane was said to have "offered contact with 'ball lightning'." Judging by the phenomenon called by that name and experienced at the surface, the aircraft damage to be expected by such contact would probably be less severe than that caused by a typical positive lightning stroke. That type of so-called "ball lightning" which is actually an intense corona discharge would not cause any mechanical damage to non-inflammable exposed materials, but would hamper radio communications by producing static similar to the kind termed "precipitation static."

A real lightning stroke to a non-metallic object on the ground often causes an explosive disruptive effect on the object and will cause burning of inflammable materials.

Contact of so-called "ball lightning" may have physical effects on exposed persons varying from negligible to

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