'Skyglow' Vision

DEVELOPMENT of electro vision tubes that will allow soldiers to fire weapons and drive tanks and other vehicles on the darkest night—by "Sky Glow" light—was disclosed by a U.S. army physicist.

John Johnson of the Army's Research and Development Laboratories in Fort Belvoir, Virginia, said the new development works by greatly intensifying images of objects bathed by the very dim, but always present light that exists in the sky at night even when there is no moon and the stars are blanked by clouds.

Amplifying on a report prepared for the sixth annual "Human Factors Engineering Conference" sponsored by the Army, Johnson said the newlydeveloped tubes, utilized in special equipment on guns or vehicles would allow the following:

- 1. An infantry soldier could spot an object at 500 to 1,000 yards, even though he couldn't see it with his naked eye.
- 2. Military tanks and other vehicles would have vision up to head lights.

The new technique — described as not yet available for routine service use, but headed in that direction — differs from the army's present method of "seeing-in-the-dark" with such instruments are the famed "snooperscape."

Instruments like the "snoscope" employ infra-red or "invisible" light which is ejected from the instrument, illuminates a given object, and then is reflected back to the viewing device.

But army scientists say infra-red devices have the disadvantage that the infra-red rays could be detected by an enemy, thereby tipping off the position of the users.

Johnson said the new electronic vision tubes take advantage of the fact that the earth is always "illuminated" at night by the so-called "Sky Glow" from the upper atmosphere which is produced in this fashion:

In the daytime, ultra-violet rays and X-rays from the sun strike molecules of air in the upper atmosphere. Then, in the cool of night, the mole-

cules re-irradiate this energy in the form of a very dim glow that includes various types of violet rays.

Water-Rattle

FIELD MARSHAL Viscount Montgomery, still mopping up after the battle of Isington Mill, recently confessed he'd been outflanked and outmaneuvered.

Britain's most famous World War II commander was forced to retreat when floods invaded his home.

After a night of torrential rain, Montgomery climbed out of bed to carry out a patrol—and found his garden and orchard under water.

Then the nearby River Wey burst its banks and joined forces with the local mill race.

Water swirled down the driveway and into Montgomery's garage. The gallant Field Marshal checked his defenses.

But the water found a chink in his armor—a door from the garage into the house had been left open.

A strategic withdrawal was inevitable.

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