

A SUBSTITUTION IN "REPORT OF UNCLASSIFIED MILITARY TERRAIN STUDIES SECTION"

By Page Truesdell

THE author of this paper has advised that in the process of drafting Figure 1 on page 470 of the June 1953 issue, the reflectance curves were plotted incorrectly. Accordingly any reference to Figure 1 should be directed to the corrected figure below given.—*Editor.*

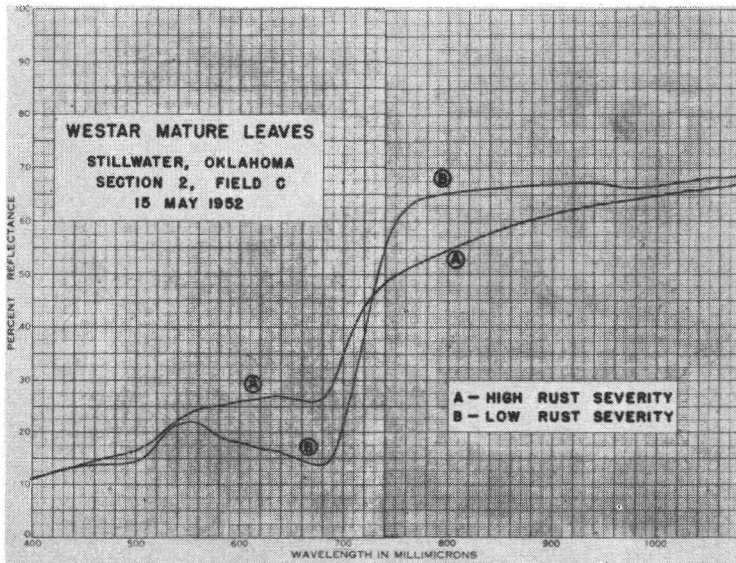


FIG. 1. Reflectance curves for wheat leaves with high and low rust severity.

STATUS OF AERIAL PHOTOGRAPHY*

THE U. S. Geological Survey recently published the Sixth Edition of the Index Map entitled "Status of Aerial Photography" which indicates photographic coverage of areas in the United States, Alaska, Hawaii, and Puerto Rico generally available for purchase by the public. An explanatory text on the reverse side of the map gives additional general information, including addresses of the various agencies that hold the aerial film. Appropriate red line patterns and a related legend provide an easy means for ascertaining the agency that holds primary coverage (photography judged to be most suitable for average needs) of a specific area. Secondary photography (generally less suitable than primary coverage from

standpoints of scale or age) is indicated by yellow tint. The status map may be obtained without charge by directing a request to the Map Information Office, U. S. Geological Survey, Washington 25, D. C.

Approximately 90 per cent of the land area of the United States has been photographed. The unphotographed 10 per cent is mainly in the far west. Due to a diversity of needs requiring different types of photography, many areas have been photographed more than once. As a general estimate, coverage which has been taken to date, as indicated on the map, totals approximately 9,000,000 square miles, including photography of areas in Alaska, Puerto Rico, and Hawaii.

* Prepared by U. S. Geological Survey.

Most of the negatives are held in part by nine Government agencies. However some of the film is held by state agencies and commercial concerns. In each case prints may be purchased only from the agency having custody of the film. There is no central sales office which can accept consolidated orders involving the photography of several agencies or firms.

The availability of a small part of the indicated coverage is governed by military regulations requiring clearance by certain authorities before a prospective purchaser's order may be honored. If a customer's request involves such photography, he will be advised regarding the proper steps to seek clearance by the agency receiving the order.

The prices charged by Government agencies are moderate, being intended to cover the cost of filling orders, without profit. As an example, contact prints the

same size as the aerial negatives are 65 cents each in quantities from 1 to 100. In quantities of 101 to 1,000 the price is 50 cents each. In many cases, enlargements up to a maximum of 4 diameters of magnification are also available. Photo index sheets showing the assembly of exposures covering a unit area, usually more than 100 square miles in extent, can likewise generally be purchased. These are \$1.10 each.

The availability of this vast photographic coverage is a matter of great interest to photogrammetrists, geologists, engineers, foresters, and many others. It affords them a means of obtaining photographs within a reasonable time and at economical costs. Thus, all types of exploration and development of both public and private projects are aided in a manner probably not surpassed anywhere else in the world.

SUSTAINING MEMBERSHIP

VECTRON, INC.*

Vectron, Inc., since its founding in 1949, has been engaged in the precision electro-mechanical instrument field. The company's plants are located in Waltham, Massachusetts and, the company has grown to the point where it currently employs approximately 200 people.

In the past four years Vectron, Inc. has built many types of photographic equipment, many of these for the Photo Reconnaissance Laboratory of the U. S. Air Force.

Included in the equipment is the Type A-2 Straight Line Indicator which, in conjunction with Shoran ground stations, acts as an automatic navigator so that the airplane pilot can fly straight, parallel flight lines for mapping purposes to an accuracy of 50 feet in a distance of several hundred miles. Pictures are taken at properly spaced intervals to provide constant overlap, and spacing between flight lines is equally accurate. With this equipment the flying of a mapping mission can be done in virtually automatic fashion.

* This company is one of those that recently became a Sustaining Member. This statement of its activities and work supplements those in the 1953 Yearbook.

Vectron has also delivered to the Air Force a Negative Duplicating Printer, which provides automatic step and repeat printing on paper or duplicating film of nine-inch aerial camera negatives. The Printer provides automatic density measurement and corresponding exposure control as well as automatic negative and paper transport. The Printer operates at a speed of 20 prints per minute.

At the present time Vectron is building a prototype model of the Panoramic Aerial Camera Type E-2. This Camera is the result of two years of design and development work and will provide continuous horizon-to-horizon scanning with constant overlap with a twenty-four inch focal length lens. The Camera will be equipped with gyroscopic steadying about the three principal axes of the aircraft, and will also contain instruments for data recording. It should be an important contribution in the field of aerial photo reconnaissance.

Vectron has also built cameras for commercial use and markets a line of commercial electronic test equipment including a Microwave Spectrum Analyzer. In addition, Vectron builds gyroscopes, automatic controls, communications networks, and computing equipment.