not meeting minimum standards for disaster preparedness would be denied Federal assistance for disaster relief. On the other hand, if the state's plan is approved, the Federal share of funds for implementing the plan would be increased to 90 percent.

Meanwhile, the National Weather Service is developing better forecasting methods. Nws is installing a number of automatic flood warning systems in the eastern United States. An enclosed float device somewhat like the bulb in a toilet tank activates an electric current when the water reaches a critical level. The electric signal goes to an alarm in a firehouse or police station. When the alarm is triggered, however, it is up to the community officials and the news media to see that the public is alerted.

The first such system was installed near Wheeling, W. Va., a little more than a month before Agnes struck, and Nws spokesmen say it performed beautifully. The Weather Service plans to install seven more of the systems within the next two years.

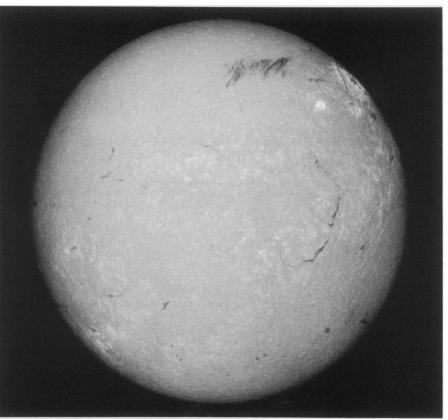
Scholarly access to Government documents

In 1958 President Truman made use of secret papers to document and publish his memoirs. These documents, still withheld from historians, have now been used by President Truman's daughter in documenting her forthcoming biography of her father. In 1970 President Johnson, during a televised interview, read from what he claimed was a classified document. Jack Anderson seems to have an unending supply of secret documents and memos. Daniel Ellsberg may eventually be condemned as a traitor for his involvement in the Pentagon Papers affair. From these examples it would seem that the present system of classification not only invites defiance of the system, but promotes unequal access to such papers among scholarly researchers.

For these and other reasons President Nixon was prompted last March to issue Executive Order 11652 on the classification and declassification of national security information and material. John Eisenhower, chairman of the Interagency Classification Review Committee, now reports that since the order became effective on June 1, the number of persons authorized to classify national security information has been reduced 63 percent, from 43,586 to 16,238. This may slow the rate of unnecessary classification and over-classification of Government documents, but some researchers feel it does not go far enough in declassifying and allowing scholarly access to such papers.

The Twentieth Century Fund, a re-

An active sun in a normally quiet period



NASA

The sun is now in the portion of its 11-year sunspot cycle when activity is expected to be at a minimum. Yet the early days of August saw a severe disturbance on the sun that produced four major flares between Aug. 2 and Aug. 7 and severe magnetic storms on earth that disrupted communications and made the polar auroras visible at middle latitudes. "Of course," says David McLean of the Space Environmental Sciences Center at Boulder, Colo., "nobody pays really strict attention to the cycle in predicting specific events." A significant outburst can happen any time; in the statistical long run they cluster in the maximum parts of the cycle. The ones recorded in early August were among the most major ever recorded.

They all came from one active region of the sun, shown in the upper right of the photo (taken Aug. 10) just as the active area came around from the sun's far side. Their significance lies not so much in their optical as in their X-ray and radio properties. Optically flares are classed according to the area of sun they cover (0 the smallest; 4 the largest) and brightness (faint, normal, bright). The best of these was a 3 bright. General X-ray classifications run from C1 to C9, M1 to M9 and then X1 to X9. The Aug. 7 flare ran the X-ray sensors off scale at X5. But, says McLean, the very large centimeter-wave radio bursts that accompanied the flares were the real indication that this was an extraordinary event. The immediate cause of the magnetic storms is protons accelerated by the flare which reach earth 45 hours after the flare. These flares increased the proton count 800 times over the background level.

search foundation in New York City, has recently issued a report that investigates the problems involved in independent scholarly research in diplomatic and military archives, the distortions that may result from unequal and privileged access to Government records and proposals for reform of the classification system.

The report, written by Carol M. Baker and Matthew H. Fox, describes the origin and development of the

classification process and the barrier it poses to scholars. The authors conclude that the Federal Government's 25-year embargo on military and diplomatic documents promotes public confusion and distrust about foreign affairs but does little to preserve the national security. They say the Truth in Government Act of 1971, proposed by Sen. Edmund S. Muskie (D-Maine), would be more comprehensive. The report calls for the establishment of an independent

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