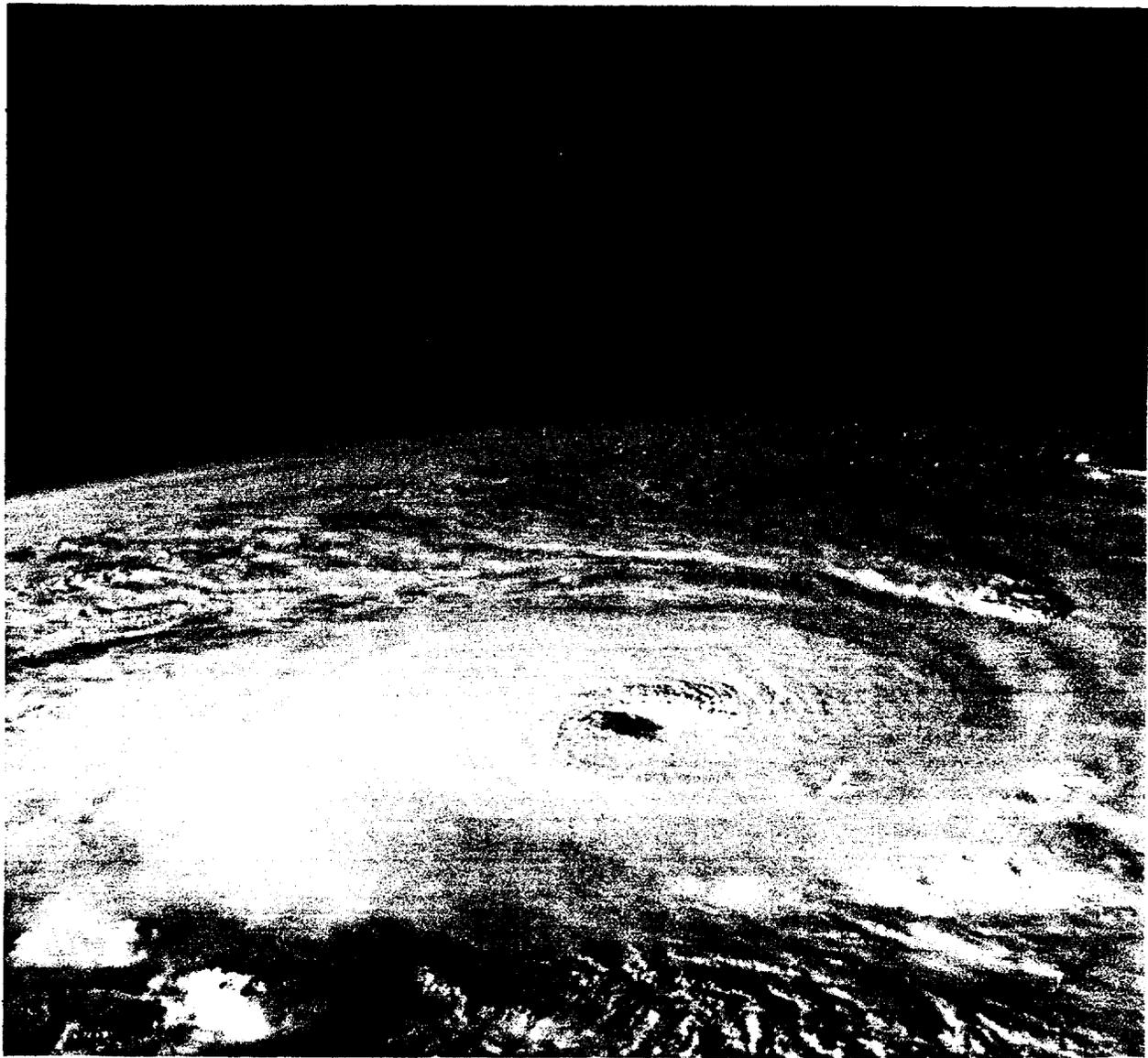


***1984  
ANNUAL TROPICAL  
CYCLONE REPORT***



***JOINT TYPHOON WARNING CENTER  
GUAM, MARIANA ISLANDS***

FRONT COVER: A synoptic view of Tropical Cyclone 30S (Kamisy) taken on 8 April 1984 by Space Shuttle Mission 41C. Kamisy was located east-northeast of Madagascar with an estimated intensity of 100 kt (51 m/s). This photograph was taken with a 100mm lens from an altitude of 260 nm (482 km). Note the convergent banding well away from the eye. The cirrus outflow is extremely strong partially obscuring the near field image. (Photograph provided by LCDR W. T. Aldinger, NAVPOLAROCEANCEN Detachment, Johnson Space Center, Texas).

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## FOREWARD

The Annual Tropical Cyclone Report is prepared by the staff of the Joint Typhoon Warning Center (JTWC), a combined USAF/USN organization operating under the command of the Commanding Officer, U. S. Naval Oceanography Command Center/ Joint Typhoon Warning Center, Guam. JTWC was established in April 1959 when USCINCPAC directed USCINCPACFLT to provide a single tropical cyclone warning center for the western North Pacific region. The operations of JTWC are guided by CINCPACINST 3140.1 (series).

The mission of the Joint Typhoon Warning Center is multi-faceted and includes:

1. Continuous monitoring of all tropical weather activity in the Northern and Southern Hemispheres, from 180 degrees longitude westward to the east coast of Africa, and the prompt issuance of appropriate advisories and alerts when tropical cyclone development is anticipated.
2. Issuing warnings on all significant tropical cyclones in the above area of responsibility.
3. Determination of reconnaissance requirements for tropical cyclone surveillance and assignment of appropriate priorities.
4. In depth post-storm analysis of all tropical cyclones occurring within the western North Pacific and North Indian Oceans for publication in this report.
5. Cooperation with the Naval Environmental Prediction Research Facility, Monterey, California, on the operational evaluation of tropical cyclone models and forecast aids, and the development of new techniques to support operational forecast scenarios.

Satellite imagery used throughout this report represents data obtained by the tropical cyclone satellite surveillance network. The personnel of Detachment 1,

1WW, colocated with JTWC at Nimitz Hill, Guam, coordinate the satellite acquisitions and tropical cyclone surveillance with the following units:

Det 5, 1WW, Clark AB, RP

Det 8, 1WW, Kadena AB, Japan

Det 15, 30WS, Osan AB, Korea

Det 4, 1WW, Hickam AFB, Hawaii

Air Force Global Weather Central,  
Offutt AFB, Nebraska

In addition, the Naval Oceanography Command Detachment, Diego Garcia, and DMSP equipped U.S. Navy aircraft carriers have been instrumental in providing vital satellite position fixes of tropical cyclones in the Indian Ocean.

Should JTWC become incapacitated, the Alternate Joint Typhoon Warning Center (AJTWC) located at the U. S. Naval Western Oceanography Center, Pearl Harbor, Hawaii, assumes warning responsibilities. Assistance in determining satellite reconnaissance requirements, and in obtaining the resultant data, is provided by Det 4, 1WW, Hickam AFB, Hawaii.

A special thanks is extended to the men and women of: 27th Information Systems Squadron, Operating Location C, for their continuing support by providing high quality real-time satellite imagery; the Pacific Fleet Audio-Visual Center, Guam, for their assistance in the reproduction of satellite and graphics data for this report; to the Navy Publications and Printing Service Branch Office, Guam, for their efforts to meet publication deadlines; and to Mrs. Patricia G. Lizama for her patience and perseverance in typing the many drafts and final manuscript of this report. A special thanks is also extended to SSGT Charles B. Siniff Jr. for gridding the numerous satellite pictures used in this report.

NOTE: Appendix V contains information on how to obtain past issues of the Annual Tropical Cyclone Report (titled Annual Typhoon Report prior to 1980).

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## INDIVIDUAL TROPICAL CYCLONES

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