

## TROPICAL CYCLONE 02A

The only significant tropical cyclone to develop in the Arabian Sea this year, Tropical Cyclone 02A, generated from a pre-existing low-level circulation beneath an area of weak upper-level divergence. The disturbance was first mentioned at 071800Z June on the Significant Tropical Weather Advisory. Subsequent satellite imagery indicated the convection was organizing as it tracked toward the northwestern coast of India. The first satellite fix was made at 090148Z, and it estimated the intensity to be 25 kt (13 m/sec). This prompted JTWC to issue a Tropical Cyclone Formation Alert at 090600Z. Although a day later the circulation was technically overland, the presence of enhanced convection overwater resulted in reissuance of the Alert at 100600Z. This Alert was later canceled as satellite and synoptic data showed that the circulation had remained overland for more than 24 hours.

At 111629Z, satellite imagery (Figure 3-02A-1) revealed that the deep convection had moved rapidly westward into the Arabian Sea as an upper-level anticyclone advanced from the Arabian peninsula into Afghanistan and increased the eastern flow aloft over the Arabian Sea. A third Alert followed at 111800Z. Late arriving 110600Z ship observations reported 35 kt (18 m/sec) and a 998 mb pressure near the circulation center. Rapidly increasing convection and low-level organization led to an Abbreviated Warning at 120600Z. Mid-level flow around the subtropical ridge over Iran and Afghanistan carried the cyclone westward, but the strong northeasterly upper-level flow from the anticyclone aloft restricted its outflow and suppressed further development. The last warning was issued at 130600Z when satellite imagery indicated that the convection had separated more than 60 nm (110 km) to the west of the low-level circulation.

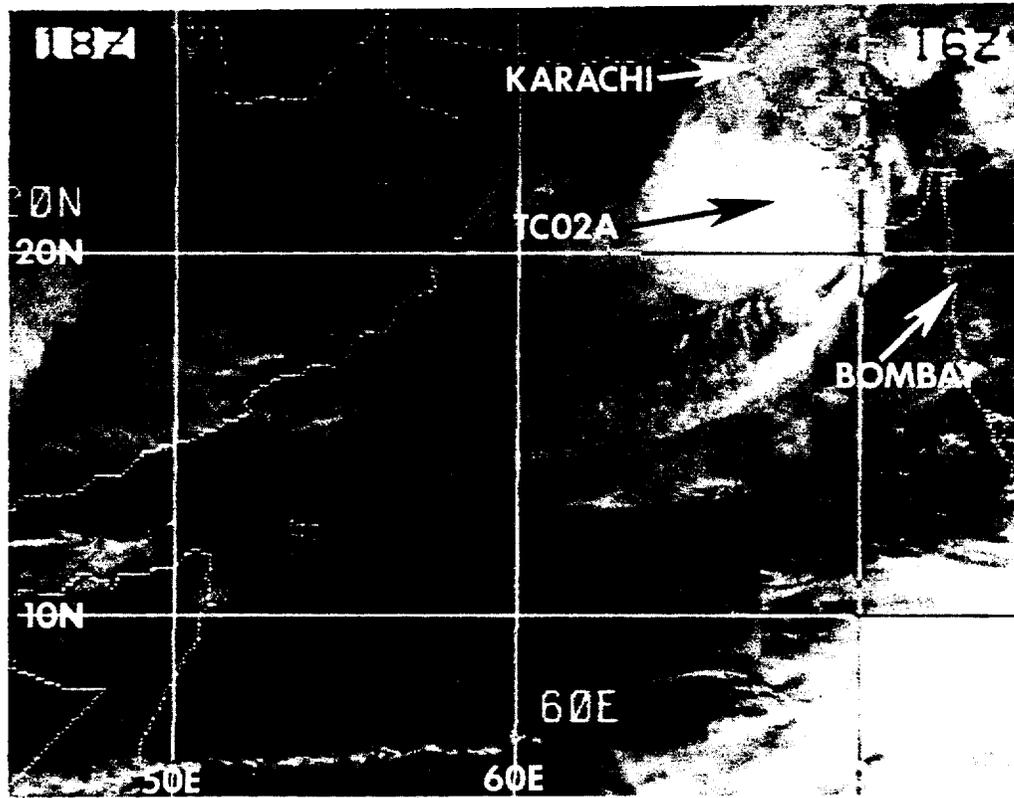


Figure 3-02A-1. A digitized mosaic of satellite data shows Tropical Cyclone 02A over the Arabian Sea (111600Z to 111800Z June DMSP infrared imagery).