



(S//SI//REL) New Processor Boosts Collection Capabilities Against Asian Satellite

FROM: multiple authors
Unknown
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(TS//SI//REL) This September, NSA and its Australian partner DSD* significantly upgraded their capability to collect communications from the Asia Cellular Satellite (ACeS), a very high-priority target. The ACeS provides dual-mode GSM/Satellite phone service to 11 million square miles in Asia, and is a source of intelligence for geolocation, targeting, the Global War on Terrorism (GWOT), Maritime Interception Operations (MIO), and smuggling. Key targets using ACeS include terrorists, narcotics dealers, government leadership, and remote-area military.



(TS//SI//REL) A new ACeS communications processor (termed SOLIDTHYME) was delivered and installed at the DSD Shoal Bay Receiving Station FORNSAT site near Darwin, Australia. SOLIDTHYME collects all 6,000 channels of the ACeS system (with a capacity of 11,000 phone calls), detects active channels, and demodulates up to 2,000 active channels based on spot beam and priority. Processed channels are forwarded to DSD's Headquarters in Canberra for exploitation.

(TS//SI//REL) SOLIDTHYME's capability to collect up to 2,000 channels represents a major improvement over the 432-channel capacity of the system it replaces, the IMPROVEOIL QRC-system. Furthermore, the IMPROVEOIL system required intensive prioritization of spot beams tasking based on joint Australian/NSA target priorities. SOLIDTHYME, by contrast, requires no spot beam tasking. Due to spacecraft damage, only 99 of 140 spot beams are currently turned on and approximately 1200 channels are active. If more than 2,000 channels become active, SOLIDTHYME will process active channels based on spot beam priority. An initial performance assessment showed 10-50% more calls on most channels than was the case with IMPROVEOIL, and higher quality.



(S//SI//REL) Already operational, a full switchover of mission will occur after a one-month burn-in period, five months earlier than planned. Decommissioning of IMPROVEOIL will occur in March 2007.

(U) POCs:

[REDACTED] S333, [REDACTED],
[REDACTED], S333, [REDACTED],
[REDACTED] S33124, [REDACTED].

*(U) Note: DSD = Australia's Defence Signals Directorate

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