



**(S) Improving and Expanding War Zone Collection**

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*(TS//SI) The new MAGICHELION system greatly improves NSA's ability to collect against the THURAYA satellite.*

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(TS//SI) NSA is dramatically upgrading its ability to collect against satellite communications in the Middle East. As a milestone, on 1 November 2005 the first MAGICHELION system "went live" at the [SCS](#) site in Kuwait City. MAGICHELION will replace the existing PARHELION systems throughout the Middle East as NSA's THURAYA satellite L-Band collection system.

(TS//SI) THURAYA has become one of the Intelligence Community's highest priority targets since 11 September 2001, when it became almost the sole source of communications in and out of Afghanistan and now for Iraq as well. THURAYA is known to be used by high-ranking members of Usama bin Laden's al-Qa'ida terrorist network. **Intelligence derived from THURAYA collection has been directly responsible for the capture and/or termination of known terrorists in both countries.**

(TS//SI) MAGICHELION deployment represents the culmination of two years of intense and dedicated efforts by FORNSAT engineers to re-architect and improve NSA's aging network of Thuraya L-Band collectors. While implementing the new collection system on an SCS-approved Common Site Architecture (CSA) platform, it's estimated the SCOM development team succeeded in also **increasing collection throughput by a factor of about six and reducing the cost per system by approximately 30%**. By summer 2006, the same hardware will host the next version of software, "MAGICHELION II," which will increase throughput by a factor of approximately thirty, solely by a software upgrade.

(TS//SI) The Kuwait MAGICHELION system is the first of about seventy procured systems to be deployed. FORNSAT and SCS are negotiating a deployment schedule to replace all existing PARHELIONS in concert with SCS CSA site upgrades during 2006. These systems will also be used to field a collection capability against the anticipated launch of THURAYA's next satellite, "T3."



*(U) THURAYA satellite (NASIC graphic)*

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