



**(S//SI) Shrinking the SIGINT Collection Suite to the Size of a Suitcase**

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An [SCS](#) office creates collection equipment for "traveling light." (S//SI)

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(S//SI) Not all SIGINT collection can be carried out from fixed sites, or even from secure areas. We must position collection equipment where it can best pick up the RF signals we want - there's no getting around the laws of physics! Sometimes this means setting up shop in an insecure or otherwise difficult location.

(TS//SI//REL) Take, for example, the below collection and relay facility on Camp Liberty in Baghdad. It consists of an antenna shed atop two shipping containers, with access via the ladder shown. [REDACTED] A SIGINT'er working at this site will wish to get in and out as quickly as possible, and will not be able to carry large pieces of equipment up the ladder in order to conduct survey operations.

[REDACTED] [REDACTED]  
(TS//SI) Collection site in Baghdad (TS//SI) SIGINT Optimization and Analysis Platform

(TS//SI//REL) For such cases, the Special Collection Service is always looking for ways to pack the maximum amount of collection capability into the minimum amount of space. SCS's Access and Analysis Division (AAD) recently developed a new, user-friendly collection suite called the SIGINT Optimization and Analysis Platform, or "SOAP." It packs a variety of important collection capabilities into a single Pelican container, using off-the-shelf hardware and custom SIGINT-related software.

(TS//SI//REL) In its current form, SOAP comprises all of the following capabilities, which add up to a versatile package:

- Dual processor server class "lunchbox" computer
- SCIATICA computer-assisted RF search tool
- Repackaged compact microwave receiver
- SHARKTAIL PCI receiver
- MARMOT demodulator
- HALFLEX radio processor
- DIA DEM (diagnosis and demodulation) software
- BLACKMAGIC modem analyzer
- TAROTCARD and HOBGOBLIN payload analysis tools
- JUGGERNAUT GSM processor
- Other applications as required for the tasked mission

(S//SI) While virtually any antenna package can be used with the SOAP system, AAD developed a lightweight and versatile system that ties directly into the SCIATICA search engine.

(TS//SI//REL) In addition to being useful for collection surveys and quick response situations, the platform can be used in a remoted mode, thereby not putting an operator's safety at risk.

(S//SI) AAD continues to look at ways to construct even smaller and lighter collection suites for the future. If you have questions about SOAP, please contact Christopher Green at [REDACTED]

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