

**Frequently Asked Questions** 

# Q. What was QUILL?

A. Quill was an experimental Synthetic Aperture Radar (SAR) satellite, based on the Corona satellite and available SAR hardware, which flew in 1964. Because of diplomatic and security concerns the brief mission imaged only selected targets within the United States. Those targets could be inspected on the ground to validate the intelligence value of orbital SAR without alerting the Soviets to the capability or touching off diplomatic protest over active illumination of sovereign territory. This was a proof-of-concept mission.

### Q. Is this the first declassification of a radar satellite?

A. The "Fact of" NRO Radar Satellite Reconnaissance was declassified on 9 June 2008. This is the first NRO study declassified about a radar satellite.

# Q. Did NRO develop and build the QUILL satellite?

A. A partnership of government (NRO) and industry designed and built the QUILL satellite using off-the-shelf technology. Once the satellite was built, the NRO had responsibility for launch and operation.

# Q. The QUILL experiment in 1964 successfully demonstrated the feasibility of collecting radar imagery from a satellite vehicle. After QUILL when did the NRO develop an operational radar satellite?

A. Subsequent to QUILL a radar satellite capability was developed. The DNI declassified the "Fact-Of" NRO Radar Satellite Reconnaissance, and that decision became effective 9 June 2008. Further details "Facts-About" remain classified.

# Q. How much did this system cost to develop and maintain?

A. No budget information about this study is being declassified.

# Q. Does NRO declassification include the imagery?

A. Unfortunately, the program records were destroyed at the end of the program. All that remains of the QUILL program itself are some final reports and a handful of scattered records. We do not have any of the raw data to look at. What remains are a few 8x10 glossy photos that can be found in the final mission report.

#### UNCLASSIFIED

# Q. Will the NRO's programmatic data on the QUILL satellite be made available to the public?

A. Yes. Although some information will remain classified, information about QUILL including the program names, mission number and dates, certain hardware, general hardware descriptions, and general information about the program's origins and functions will be declassified.

# Q. Will the QUILL space vehicle be put on public display?

A. Unfortunately, the second space vehicle was taken apart and used for parts after the first vehicle completed its proof-of-concept mission.

# Q. What was the value of the QUILL satellite?

A. QUILL was a program well ahead of its time, it starts asking the engineering questions, asking the analytical questions and training the analysts. In 1964, NRO was just beginning to get quality imagery with CORONA. The NRO didn't have the processors yet and didn't have the analytical background, so QUILL become an engineering challenge and a challenge in opening analysts' eyes to the capabilities that are in this new Radar technology.

# Q. Why did it take so long to declassify this study?

A. Quill's existence had to remain classified entirely until space based imaging radar, the U.S. intelligence community's use of it and the organization that ran such systems were all declassified. Major declassifications take years to review the material and determine what data and information is no longer sensitive and can be declassified. This requires coordination and collaboration with other organizations in the intelligence community.

# Q. What other materials has NRO declassified?

A. The NRO has declassified thousands of pages about the following systems: CORONA, ARGON, LANYARD, WS117L, SAMOS, SENTRY, GRAB, POPPY, GAMBIT, HEXAGON and also the NRO Staff Records.