

19 August 2017

The Intercept

<https://theintercept.com/2017/08/19/nsa-spy-hub-cia-pine-gap-australia/>

NSA Intelligence Relationship with Australia

M7600 M8300 SIGINT Guide

Pine Gap Site Profile

RAINFALL (Pine Gap) Classification Guide

NRO SIGINT Guide Pine Gap



**National Security Agency  
Central Security Service**

April 2013

**Information Paper**

**(U) Subject: NSA Intelligence Relationship with Australia**

**(U) Executive Summary**

(S//REL) The mutually beneficial partnership between the United States and Australia continues to grow. Australia's Intelligence Community (AIC), which includes NSA's SIGINT partner, the Defence Signals Directorate (DSD), looks to the U.S. Intelligence Community in general, and NSA specifically, for continued guidance as it expands its cyber capabilities. DSD continues to contribute in significant ways to efforts on China, cyber, and support to military operations (SMO) in Afghanistan. DSD has broken new ground in several operational areas and accelerated evolving cyber policies to meet the challenges of multiple operators in the cyber domain.

(S//REL) Although budget cuts have constrained DSD's funding and personnel, DSD believes the cuts will be manageable. Most new personnel and investment at DSD are associated with cyber operations: Computer Network Exploitation (CNE), Computer Network Attack (CNA), Computer Network Defense (CND) – DSD's three cyber authorities. There is no U.S. Cyber Command equivalent in Australia as DSD performs that function for the Australian Defence Force. Mr. Ian McKenzie has been Director DSD since 2007.

**(U) Key Issues**

(C//REL) In response to malicious cyber attacks, the Australian Government recently established the Australian Cyber Security Centre to improve partnerships between government agencies and with industry. By the end of 2013, the Government's most sophisticated cyber security capabilities—from across the national security community—will be located in one facility. This will create a more holistic picture of the cyber threat and facilitate faster and more effective responses to serious cyber incidents. There will be improved interaction with international and industry partners and will make Australia a harder target for malicious cyber activities.

(TS//SI//REL) The AIC plans to further develop and maintain assessment and collection capabilities to provide more comprehensive intelligence coverage [REDACTED]. China is changing the strategic balance in the Pacific by expanding its interests in the Asia-Pacific region and the Indian Ocean, modernizing its military, striking a more assertive strategic posture, and flaunting its power. Increased emphasis on China will not only help

Derived From: NSA/CSSM 1-52  
Dated: 20070108  
Declassify On: 20320801

ensure the security of Australia, but also synergize with the U.S. in its renewed emphasis on Asia and the Pacific.

### **(U) What NSA Provides to the Partner**

(S//REL) NSA provides cryptologic products/services to the Government of Australia through DSD, on virtually all subjects, particularly those related to the Pacific Rim. NSA shares technology, cryptanalytic capabilities, and resources for state-of-the-art collection, processing and analytic efforts. NSA will continue to work closely with Australia to meet its commitments as the U.S reallocates efforts toward Asia and the Pacific.

### **(U) What the Partner Provides to NSA**

(TS//SI//REL) NSA and DSD have agreed to specific divisions of effort, with the Australians solely responsible for reporting on multiple targets in the Pacific area, including Indonesia, Malaysia, and Singapore, based on their unique language capabilities and geographic accesses. In addition, DSD has primary reporting responsibility [REDACTED] [REDACTED] regardless of geographic region. DSD provides access to commercial and foreign/domestic satellites from sites in Geraldton and Darwin, High Frequency (HF) collection and Direction Finding (DF) from three sites; and, manning of the operations floor at Joint Defense Facility at Pine Gap (RAINFALL), a site which plays a significant role in supporting both intelligence activities and military operations. In addition, DSD provides NSA with access to terrorism-related communications collected inside Australia.

### **(U) Success Stories**

(TS//SI//REL) The close collaboration between NSA and DSD has been particularly useful in providing cryptologic insight into Chinese targets. A high-level framework for collaboration between DSD and NSA on understanding the life cycle of China [REDACTED] is in coordination. Australia's overall intelligence effort on China, as a target, is already significant and will increase in 2013, as it draws down its presence in Afghanistan. [REDACTED]  
[REDACTED]

(S//REL) Further evidence of DSD's close collaboration with NSA and the U.S. is DSD's membership in several coalitions, including SIGINT Seniors Pacific (SSPAC)<sup>1</sup>, SIGINT Seniors Europe (SSEUR)<sup>2</sup>, and the Afghanistan SIGINT Coalition (AFSC)<sup>3</sup>. DSD is chairing both the SSPAC Executive Board and Analytic Working Group, from 2012 to 2014.

(TS//SI//REL) An example of Australia's support to international cyber security is DSD's SPARTA campaign, which dovetails with the U.S.-directed Operation DAYBREAK, a long-term

---

<sup>1</sup> (S//REL) SSPAC - Australia, Canada, France, India, Korea, New Zealand, Singapore, Thailand, United Kingdom, and United States

<sup>2</sup> (S//REL) SSEUR - Australia, Belgium, Canada, Denmark, France, Germany, Italy, Netherlands, New Zealand, Norway, Spain, Sweden, United Kingdom and United States

<sup>3</sup> (S//REL) AFSC - Australia, Belgium, Canada, Denmark, France, Germany, Italy, Netherlands, New Zealand, Norway, Spain, Sweden, United Kingdom, and United States

effort to counter Chinese theft of sensitive business information and proprietary technology. SPARTA has already met with success since being rolled out in February 2013.

**(U) Problems/Challenges with the Partner**

(U) None.

(U//FOUO) Prepared by: [REDACTED]  
Foreign Affairs Directorate  
Country Desk Officer, Australia  
[REDACTED]

## **SECRET//COMINT//TALENT KEYHOLE//REL TO USA, AUS, and GBR//25X1**

(S//TK) Mission 7600 is a versatile SIGINT collection system designed to downlink unprocessed SIGINT data. Mission 7600 satellites are in geostationary orbits designed to allow near continuous coverage of the majority of the Eurasian landmass. Signals processed at the Mission 7600 MGSs (RAF Menwith Hill Station, UK and the Joint Defense Facility Pine Gap, Alice Springs, Australia) are primarily military COMINT targets located on the Eurasian landmass, although a variety of non-communications emitters can be processed as well. Some analysis of the collected data is done at the MGS, but the great majority of the collected signals are forwarded to NSA for exploitation. Dissemination of intelligence from the collection is primarily through NSA reporting channels.

(S//TK) The geostationary orbit of the Mission 7600 satellites allows them to provide continuous coverage of the majority of the Eurasian landmass and Africa. [REDACTED] (Movement of the satellite within its orbit results in partial daily coverage [REDACTED])

(S//TK) The satellites' configuration of fixed and steerable feeds allows simultaneous collection against multiple signal types (COMINT, ELINT, MASINT, etc.) located across a broad geographic area.

(S//TK) Geolocation computations can be performed at the MGS against signals which are simultaneously collected by at least two satellites. Currently geolocation is possible against signals [REDACTED] Geolocation accuracy varies [REDACTED]

(S//TK) Unprocessed SIGINT signal intercepts are downlinked to the MGS in real-time for processing, recording and/or dissemination as required. High priority COMINT data is forwarded in real-time to NSA, with some data also sent to the Kunia Regional SIGINT Operations Center (RSOC) for immediate processing by NSA analysts and reporting as a TACREP. Lower priority data is forwarded to NSA for later processing.

### 4.5.1 (U) Primary System Mission

(S//TK) Mission 7600 was designed originally as a FISINT collector but now is primarily used as a COMINT collection system against known targets of high intelligence value. Currently, about 85% of Mission 7600 collection is against these COMINT targets.

### 4.5.2 (U) Secondary System Missions

(S//SI//TK) Mission 7600 also has the capability to collect against the following target types:

- a. FISINT
- b. MASINT
- c. Technical ELINT
- d. PROFORMA/RSBN
- e. Other COMINT
- f. Satellite links (uplinks, cross-links, and downlinks)

### 4.6 (S//TK) Mission 8300 (ORION/RIO) Program Overview

(S//TK) The Mission 8300 system, the geosynchronous earth orbit (GEO) component of IOSA, is a four satellite constellation, and replaces both Mission 7500 and Mission 7600 current systems. Mission 8300 satellites has command and control located at two overseas mission ground sites. The first Mission 8300 spacecraft was launched 9 Sep 03.

#### 4.6.1 (U) System Missions

- 4.6.1.1 (S//TK) The Mission 8300 system is designed to collect, process, record, and report Signals Intelligence (SIGINT) information.
- 4.6.1.2 SIGINT support to US military combat operations
- 4.6.1.3 Crisis monitoring
- 4.6.1.4 Indications and warning support to the United States and deployed US forces

**SECRET//COMINT//TALENT KEYHOLE//REL TO USA, AUS, and GBR//25X1**

## **SECRET//COMINT//TALENT KEYHOLE//REL TO USA, AUS, and GBR//25X1**

- 4.6.1.5 OPELINT operations to collect, identify and geolocate threat emitters (cross-site/cross system operations in conjunction with Mission 8200)
- 4.6.1.6 COMINT associated with command and control of military forces, movements of VIPs, deployment of military units, states of readiness, training proficiency, and combat operations
- 4.6.1.7 PROFORMA associated with military data systems (air defense, artillery, etc.)
- 4.6.1.8 Collection of line-of-sight low/high capacity COMINT signals
- 4.6.1.9 Collection of communications and electronic signals [Foreign Instrumentation Signals Intelligence (FISINT)], associated with weapons test ranges, science and technology centers, and production and logistics facilities
- 4.6.1.10 Monitoring testing activity to detect changes in weapons employment doctrine and to verify compliance with strategic arms limitations agreements
- 4.6.1.11 Collection of satellite/space systems signals
- 4.6.1.12 Monitor nuclear weapons and high-energy weapons testing [MASINT-Electromagnetic Pulse (EMP)]

### 4.6.2 (U) Orbital Characteristics

4.6.2.1 (S/TK) The Mission 8300 system has four satellites in near-geosynchronous earth orbits. Residual satellites may be available to augment the baseline three-spacecraft constellation. It is important to note that the satellites do not have simultaneous access to the entire area where the potential for coverage exists. Actual targeted areas will be determined by specific tasking instructions.

4.6.2.2 (S/TK) Within areas of potential coverage, the effective coverage footprint is determined by the following factors:

1. Primary Factors
  - a. Emitter frequency: Generally, the targeting of higher frequencies results in smaller collection footprints than for lower frequencies.
  - b. Look angle: The coverage footprint will increase as the satellite look angle increases, i.e., the farther towards the horizon that the satellite looks. Other factors being equal, the footprint will be smallest when the look angle is 0° (directly below the spacecraft).
2. Other Factors
  - a. Emitter transmission power
  - b. Emitter antenna type
  - c. Emitter antenna orientation
  - d. Modulation type

4.6.2.3 (S/TK) Mission 8300 Orbit Benefits:

1. Stable, continuous dwell for 24-hour collection
2. Coverage of primary target areas: Former Soviet Union, China, South Asia, East Asia, Middle East, Eastern Europe, and the Atlantic landmasses.

### 4.6.3 (U) Operational Characteristics and Capabilities

4.6.3.1 (TS/TK) System Characteristics:

1. Four spacecraft in near-geosynchronous earth orbit
2. Simultaneous multi-mission SIGINT operations (ELINT, COMINT, FISINT and PROFORMA)
3. Common command and control; spacecraft can move between Mission Ground Stations in response to crisis/contingency requirements

4.6.4 (S/TK) Mission 8300 benefits:

1. Increased wideband channels and downlink capacity for wideband collection, especially TECHELINT from modern modulation emitters

**SECRET//COMINT//TALENT KEYHOLE//REL TO USA, AUS, and GBR//25X1**

**SECRET//COMINT/TALENT KEYHOLE//REL TO USA, AUS, and GBR//25X1**

2. Dedicated second antenna for ELINT, test range surveillance and signal search
3. High-accuracy OPELINT geolocation capability through cooperative cross-site/cross-system operations with Mission 8200
4. Common high-sensitivity spacecraft design, with capability to relocate spacecraft (orbit nodal repositioning)
5. Collection from different orbit locations through two different MGSS
6. Flexible crisis/contingency support

## Site Profile G – (U) RAINFALL

(U) This site profile is to be used in conjunction with [USSID SE5330](#), “SIGINT Mission of the NSA/CSS Enterprise Radio Frequency Collection Sites,” dated 14 March 2012.

---

ISSUE DATE: 23 August 2012

REVISED DATE:

---

### (U) TABLE OF CONTENTS

---

(U) Sections	Section 1 – (U) <a href="#">TASKED ACTIVITY</a>
	Section 2 – (U) <a href="#">MISSION</a>
	Section 3 – (U) <a href="#">CONTROL</a>
	Section 4 – (U) <a href="#">SIGINT PRODUCTION AND MANAGEMENT STRUCTURE</a>
	Section 5 – (U) <a href="#">SIGINT OPERATIONAL RELATIONSHIPS</a>
	Section 6 – (U) <a href="#">TRAINING</a>
	Section 7 – (U) <a href="#">COMMUNICATIONS</a>
	Section 8 – (U) <a href="#">CONTINGENCY AND READINESS PLANNING</a>
	Section 9 – (U) <a href="#">SECURITY</a>
	Section 10 – (U) <a href="#">REFERENCES</a>

---

### SECTION 1 - (U) TASKED ACTIVITY

---

(U) Tasked Activity 1.1. (S//TK//REL) USJ-599 is the Signals Intelligence (SIGINT) Activity Designator

Derived From: NSA/CSSM 1-52  
Dated: 20070108  
Declassify On: 20370801



(SIGAD) assigned to the National Security Agency/Central Security Service (NSA/CSS) activity at Joint Defence Facility Pine Gap (JDFPG), unclassified coverterm RAINFALL, located in Alice Springs, Australia. The unclassified coverterm RAINFALL is used in this site profile for solely NSA/CSS activities at JDFPG. The abbreviation JDFPG is used for all activities taking place at the JDFPG facility to include NSA/CSS activities and non-NSA/CSS activities, such as logistical support, research and development, and spacecraft operations controlled by the National Reconnaissance Office (NRO) and the Government of Australia (GOA). JDFPG is also known as Australia Mission Ground Station (AMGS). The site is governed by the Implementing Arrangement between the United States Central Intelligence Agency (CIA) and the Australian Department of Defence on behalf of the Government of Australia (GOA) (1966, 1988) as well as the Implementing Agreement between the Director, National Security Agency/Chief, Central Security Service (DIRNSA/CHCSS); Director, National Reconnaissance Office (NRO); and Deputy Director for Science and Technology, CIA for Assignment of NSA/CSS Personnel to RAINFALL (dated 23 December 1997).

1.2. (S//REL) JDFPG is a unique facility that is jointly staffed by both U.S. and Australian personnel. The U.S. contingent comprises NSA/CSS civilian, contractor, and Service Cryptologic Component (SCC) personnel from the U.S. Army, Navy, and Air Force, as well as civilian, military, and contractor personnel from the CIA and NRO. GOA personnel include both civilian and military personnel from the Defence Signals Directorate (DSD) and the Australian Defence Forces (ADF). The GOA personnel are assigned to RAINFALL under agreement between the U.S. and Australian Governments. Employees of other FIVE EYES SIGINT agencies may be assigned to RAINFALL on a case-by-case basis.

1.3. (S//SI/TK//REL) RAINFALL is responsible for SIGINT collection, processing, analysis, forwarding, and reporting derived from the Mission 7600 and Mission 8300 (M7600/M8300) (US-903) Radio Frequency (RF) collection systems.

- a. (U) Location: Alice Springs, Australia
- b. (U) Security Classification: TOP SECRET//SI/TK
- c. (U) Cryptologic Risk Assessment: Minimal
- d. (U//FOUO) Producer Designator Digraph (PDDG): ZZ (Zulu Zulu)
- e. (U//FOUO) Integrated Broadcast System (IBS) Simplex Digraph:
  - JW (Juliatt Whiskey) for COMINT and ELINT
  - JZ (Juliatt Zulu) for Interactive ELINT Processor
- f. (S//TK//REL) The following Satellite Designators are associated with M7600/M8300 and assigned to RAINFALL:
  - Mission 7605 - US-903D
  - Mission 7606 - US-903E

- Mission 7607 - US-903F
  - Mission 8301 - US-903H
  - Mission 8303 - US-903J
- g. (U//FOUO) NSA/CSS Organizational Designator: F78.

---

## SECTION 2 - (U) MISSION

---

**(U) Mission**

2.1. (S//SI//REL) The major RAINFALL mission components are:

- (U) Foreign Instrumentation Signals Intelligence (FISINT)
- (U) Electronic Intelligence (ELINT)
- (U) PROFORMA
- (U) Communications Intelligence (COMINT)
- (U) SIGINT Development (SIGDEV)/Search and Survey
- (U) Support to Military Operations (SMO)

2.2. (U//FOUO) With assigned resources, RAINFALL will:

- a. (U//FOUO) Conduct cryptologic activities in support of U.S. and Second Parties, departments, agencies, commands, and activities. Provide cryptologic service and support to authorized recipients in response to their requirements.
- b. (C//REL) Conduct COMINT, ELINT, FISINT, and PROFORMA collection, analysis, and reporting against assigned targets in accordance with (IAW) applicable USSIDs and other tasking directives in response to the guidance and tasking of the Overhead Collection Management Center (OCMC).
- c. (C//SI//REL) [REDACTED]
- d. (C//REL) Perform SIGDEV on all nature of signals in support of customer needs and requirements.
- e. (S//REL) Collect data exfiltration signals IAW tasking.
- f. (TS//REL) [REDACTED]
- g. (U//FOUO) Participate in the planning for and deployment of new collection and processing systems to be installed and tested at USJ-599.

---

**(U) Unclassified**

2.3. (U//FOUO) The following unclassified mission statement, without further expansion

**Mission Statement** or explanation, may be released orally by the Chief of Operations:

(U) "The JOINT DEFENCE FACILITY PINE GAP (JDFPG) is a joint U.S./Australian defense facility whose function is to support the national security of both the U.S. and Australia."

*NOTE: (U) Avoid any implication that this statement is only a sanitized portion of a larger classified effort.*

---

### SECTION 3 - (U) CONTROL

---

**(U) Control** 3.1. (U) RAINFALL is subject to the control outlined in Section 3 of [USSID SE5330](#).

**(U) Oversight and Compliance Australian Restrictions** 3.2. (C//REL) In addition to U.S. Intelligence Oversight and Compliance restrictions, ([USSID SE5330](#), Section 3, paragraph 3.12), RAINFALL must comply with both the Australian [Intelligence Services Act 2001 \(ISA\)](#) and the [Telecommunications \(Interception and Access\) Act 1979 \(TIA Act\)](#), as well as other applicable DSD Compliance policies in all operations involving the production and handling of SIGINT. These provisions take precedence over any existing collection, processing, or reporting guidance.

---

### SECTION 4 - (U) SIGINT PRODUCTION AND MANAGEMENT STRUCTURE

---

**(U) Information Needs (INs)** 4.1. (U//FOUO) RAINFALL responds to national Information Needs (INs) under the National SIGINT Requirements Process (NSRP).

**(U) Collection** 4.2. (C//REL) RAINFALL will conduct collection operations, including sustained collection and search and geolocation, IAW formal mission tasking as issued by the OCMC.

**(U) Signals Analysis** 4.3. (C//REL) RAINFALL will perform on-line and off-line signals analysis on collected signals. On-line signals that remain unresolved for 24 hours may be sent to the off-line area. Off-line signals that remain unresolved for 7 days may be sent to NSA/CSS for further analysis.

**(U) Cryptanalysis** 4.4. (S//REL) RAINFALL may perform limited cryptanalysis, cryptanalytic research, and development of enciphered signals of interest to NSA/CSS Signals Intelligence Directorate (SID) and DSD.

**(U) Data** 4.5. (S//SI//REL) Using SIGINT systems and techniques, RAINFALL conducts data

**Exfiltration**

exfiltration operations to provide a communications path for special customers.

---

4.6. (S//REL) [REDACTED]

---

**(U) Foreign Instrumentation Signals (FIS) Analysis**

4.7. (S//REL) RAINFALL will detect, collect, demodulate, decommutate, and analyze FIS associated with missile, target, unmanned aerial vehicle, aircraft, and space vehicle activity.

4.8. (S//REL) RAINFALL is occasionally tasked with support to selective U.S. space launches and programs, and additional processing instructions may be included in OCMC tasking.

4.9. (S//REL) RAINFALL was selected as a test site for development supporting the concept of a consolidated FIS Operations Center. The site will support the concept through development of the associated Test Plan, Concept of Operations (CONOP), bandwidth requirements, and distributed processes supporting this mission area.

---

**(U) Electronic Intelligence (ELINT) Analysis**

4.10. (S//REL) RAINFALL detects, identifies, geolocates, and reports ELINT signals of interest IAW tasking and by utilizing targets of opportunity. Technical ELINT (TECHELINT) is performed with the Interactive ELINT Processor (IEP) system, which generates digitized files containing Pulse Descriptor Words (PDWs) and Continually Digitized Intermediate Frequencies (CDIFs). These files are used by site to perform data analysis, selection, and reporting IAW specific tasking and technical guidance. Operational ELINT (OPELINT) is performed with the SIGINT Processing Emitter Mapping Architecture (SPECTRE) system, which allows site to aggressively pursue cross-site geolocations and reporting.

---

**(U) PROFORMA Analysis**

4.11. (S//REL) RAINFALL detects, collects, records, processes, analyzes, and reports on PROFORMA signals collected from tasked target entities. The focus of the PROFORMA mission at USJ-599 is search and discovery of new signals or new use of known signals.

---

**(U) Geolocation**

4.12. (S//REL) One of RAINFALL's primary mission areas is the detection and geolocation of COMINT, ELINT and FISINT signals. The site has a number of tools available for performing geolocations, providing a broad range of geolocation capabilities either with USJ-599 resources or in conjunction with other overhead, tactical, and fixed site systems.

---

**(U) Reporting - SIGINT Products**

4.13. (U) RAINFALL is authorized to issue:

- a. (U//FOUO) CRITIC Reports IAW [USSID CR1501](#), "Handling of Critical Information," dated 13 August 2009, revised 23 March 2012.
- b. (U) KLIEGLIGHTS and Tactical Reports (TACREP) IAW [USSID CR1500](#),

“Time-Sensitive SIGINT Reporting,” dated 7 June 1996.

c. (U//FOUO) Distress Signal Reports IAW [USSID CR1521](#), “Reporting of Distress Signals,” dated 20 December 2010, as required.

---

**(U) Reporting -  
Technical Reports**

4.14. (U//FOUO) RAINFALL is authorized to forward unevaluated and unminimized (raw) SIGINT data and issue a number of technical reports. RAINFALL may also issue reports in support of the Developmental Signals Collection and Analysis (DSCA) Program. (See [USSID DA3495](#), “Developmental Signals Collection and Analysis (DSCA) Program,” dated 4 March 2010.)

4.15. (U//FOUO) The Collection Management Authority requires all Signals Analysis resources to produce standardized reporting vehicles (e.g., [USSID DA3611](#), “Standard Technical Report Using Modules (STRUM),” dated 6 April 2006), and serialized technical documentation (e.g., monthly notes, Informal Technical Notes (ITNs), Telecommunications Information Reports (TELIRs), web-based technical reports, and signals analysis narratives).

---

**(U) SIGDEV**

4.16. (C//REL) The scope of SIGDEV encompasses not only traditional target and technology development, but also discovery of points of vulnerability and identification of best points of access to guide United States SIGINT System (USSS) investment choices in anticipation of target technology trends. Using primarily Overhead assets, RAINFALL’s SIGDEV efforts will follow guidelines set forth in [USSID SD4000](#), “Signals Intelligence Development,” dated 6 April 2011, and [USSID DA3495](#). RAINFALL will concentrate on search and survey, signals analysis, signals development, and network knowledge, which is information pertaining to telecommunications media networks/infrastructures to include logical and physical networks. RAINFALL will also share information and assist in identifying access points with other elements/sites.

---

**(U) Discovery**

4.17. (S//REL) RAINFALL maintains close continuity on all site collection resources to optimize planning, collecting, processing, and forwarding of all signals of interest in the site’s collection environment. Serving as a forward-deployed NSA/CSS and DSD Operations element, signals analysts work closely with mission planners, collection operators, intelligence analysts, and off-line signals analysts to coordinate and satisfy developmental tasks and to resolve unidentified signals in concert with the Overhead Collection Manager (OCM) and the Office of Primary Interest (OPI) elements at the respective Headquarters. Special emphasis is also given to assisting these offices in isolating new and more sophisticated signals via focused search tasks implemented by SIGINT Development analysts against an ever-growing global target set.

---

**(U) Organizational  
Structure**

4.18. (U//FOUO) JDFPG consists of three divisions: Support, Engineering, and Operations (RAINFALL).

---

**(U) JDFPG Senior**

4.19. (S//TK//REL) The Chief of Facility (COF) exercises on-site responsibility for

**Leadership**

overall management, operations, and administration of JDFPG. The COF is accountable to Director, National Reconnaissance Office (DNRO).

4.20. (U//FOUO) The Deputy Chief of Facility (DCOF) is the senior DSD official assigned to the JDFPG in order to advise, assist, and support the COF in managing JDFPG and its activities, and acts as the COF during the absence of the COF.

---

**(U) Engineering Division, Chief of Engineering (COE)**

4.21. (S//REL) The COE is an NRO official who exercises responsibility for operation and maintenance of the operational baseline, as it is delivered and documented, in support of the site's SIGINT mission. The COE is also responsible for interacting with and assisting the NRO development community to ensure timely integration of new capabilities required by the site. The COE is accountable to the COF for engineering-related matters at site.

---

**(U) Support Division, Chief of Support (COS)**

4.22. (S//TK//REL) The COS is an NRO official who is responsible for logistics and building maintenance in support of JDFPG's mission. This includes JDFPG's powerhouse, water supply, and other critical elements necessary to perform the mission.

---

**(U) Operations Division, Chief of Operations (COP)**

4.23. (C//REL) The COP, an NSA/CSS official, exercises on-site responsibility for the SIGINT collection, processing, exploitation, forwarding and dissemination of signals collected at RAINFALL. The COP receives normal supervision and support from the COF and operational direction from the NSA/CSS SIGINT Director. The COP is responsible to DIRNSA/CHCSS for all RAINFALL SIGINT operations and to the COF for matters such as the management of the Operations Department. The COP is the senior NSA/CSS representative at RAINFALL. As such, this individual will be the principal advisor to the COF and the JDFPG chain of command on all NSA/CSS and SIGINT issues. As the senior NSA/CSS representative, the COP will be afforded the opportunity to provide comments to performance evaluations for all U.S. Department of Defense personnel assigned.

---

**(U) Mission Director (MD)**

4.24. (C//REL) The MD, the senior on-watch manager, is responsible for on-going watch operations and acts in the capacity of the COF, DCOF, and COP during non-business hours. The MD serves as the senior facilities, engineering, and support representative after normal duty hours and coordinates with appropriate senior management for availability of mission critical support during unforeseen and/or emergency circumstances.

---

**SECTION 5 - (U) SIGINT OPERATIONAL RELATIONSHIPS**

---

**(U) SIGINT Operational Relationships**

5.1. (U//FOUO) In addition to the SIGINT operational relationships outlined in Section 5 of [USSID SE5330](#), RAINFALL has the following relationships:

---

**(U) Cryptologic Centers/  
Cryptologic Center Concept Partners (CCCPs)**

5.2. (S//TK//REL) Coordination of collection resources with CCCPs is predominantly handled via the Integrated Overhead Space Architecture Remote Collection Coordinator (IRCC), who is located at [USJ-751](#) (Colorado) for routine, tasked mission. Intelligence coordination, activity tip-off and fusion of COMINT, ELINT, and FISINT activity between RAINFALL, the Cryptologic Centers, the CCCPs, and other SIGINT and Intelligence Community (IC) watch operations is handled primarily by the Mission Situational Awareness (MSA) Cell at USJ-751. Coordination with remote partners in response to non-routine events or resolution of resource conflicts is performed by the MD in concert with Senior Watch Officers at the remote facilities.

---

**(U) Government of Australia**

5.3. (C//REL) As stated in the Implementing Arrangement between governments, the right to task RAINFALL by GOA will be accomplished through the USSS IAW existing U.S./Australian SIGINT arrangements. RAINFALL SIGINT analysts will only have access to data releasable to at least the U.S. and Australia per Australian rules governing Full Knowledge and Concurrence (FK&C). RAINFALL will not be operated for any purpose without the FK&C of the GOA. The GOA has the right of access to the full product of the facility through procedures established in NSA/CSS-DSD agreements and practices. The U.S. and Australia agreed to the principles of FK&C in the 1976 Implementing Arrangement for JDFPG. FK&C is important so that the Australian Government can assure the Australian Parliament and the Australian people that all activities conducted at JDFPG are managed with the GOA's full agreement and understanding.

---

**(U) Third Party Liaison**

5.4. (U//FOUO) RAINFALL maintains no Third Party relationships.

---

## SECTION 6 - (U) TRAINING

---

**(U) Training**

6.1. (U//FOUO) In addition to the training requirements outlined in Section 6 of [USSID SE5330](#), RAINFALL has the following requirements.

---

**(U) Cryptologic Training**

6.2. (U//FOUO) As a remote facility with limited training opportunities, RAINFALL relies on the recruitment process to receive fully trained operators on site. RAINFALL specifically:

- a. (C//REL) Provides limited specialized operational training for personnel in signals collection, processing, signals and target analysis, and reporting.
- b. (C//REL) Develops and maintains positional training programs and training aids to assist signals collectors and analysts in the skill areas necessary to fulfill RAINFALL's mission.
- c. (U//FOUO) Ensures classification guidance training is provided, to include web classification standards and guidance, in coordination with NSA/CSS classification

requirements.

d. (U//FOUO) In coordination with site leadership, provides a mechanism for ensuring personnel awareness of mandatory training requirements, e.g., records management, information assurance, computer security, physical security, etc.

e. (U//FOUO) In conjunction with the Intelligence Oversight Program Manager, ensures intelligence oversight (IO) training is accomplished IAW annual requirements, to include familiarization with IO regulations, orders, rules, and policies.

---

## SECTION 7 - (U) COMMUNICATIONS

---

**(U) Network Access** 7.1. (C//REL) The site host, NRO/CIA, is responsible for ensuring availability of adequate secure communications facilities at RAINFALL with the exception of the following for which RAINFALL operates:

- a. (U) Various enterprise-wide collaboration tools; and
- b. (U//FOUO) Video-teleconferencing (VTC) via NSA/CSS's Medianet system.

7.2. (U//FOUO) RAINFALL has access to the following communications networks through the NRO/CIA or DSD:

- a. (U) NSANet;
- b. (U) Critical Intelligence Communications System (CRITICOMM);
- c. (U) Special Operations Communications (SOCOMM);
- d. (C//REL) SECRET Internet Protocol Router Network Releasable FIVE EYES (SIPRNet REL);
- e. (U) Non-CLASSIFIED Internet Protocol Router Network (NIPRNet); and
- f. (U) Secure Terminal Equipment (STE).

---

## SECTION 8 - (U) CONTINGENCY AND READINESS PLANNING

---

**(U) Requirements** 8.1. (U//FOUO) RAINFALL's contingency and readiness planning requirements will follow those outlined in Section 8 of [USSID SE5330](#). In the event of severe loss or disruption of facilities infrastructure, RAINFALL will follow the procedures listed in the AMGS Contingency Operations (COOP) Operating Instruction dated May 2012.



## SECTION 9 - (U) SECURITY

---

(U) Security 9.1. (U//FOUO) All of RAINFALL's security requirements are outlined in Section 9 of [USSID SE5330](#).

---

## SECTION 10 - (U) REFERENCES

---

(U) NSA/NRO Memorandum of Agreements (MOAs) 10.1. (S//REL) An [MOA between DIRNSA/CHCSS, DNRO and the Deputy Director for Science and Technology/CIA](#), dated 30 December 1997, describes assignment of personnel to RAINFALL. The MOA and accompanying annexes and appendices define policies, procedures, and conditions concerning the assignment of NSA/CSS civilian and Service Cryptologic Component (SCC) military personnel and family members on permanent change of station (PCS) assignment to RAINFALL.

10.2. (S//TK//REL) An [MOA between the NSA/CSS and the NRO for System Requirements and SIGINT Satellite Operations](#), dated 20 February 2006, describes the operational responsibilities at RAINFALL.

a. (S//TK//REL) NSA/CSS and NRO will share the responsibility for the responsive operation of the SIGINT satellite and ground systems at SIGINT Mission Ground Stations (MGSs). This cooperative enterprise will take advantage of the strengths of each organization.

b. (C//REL) NSA/CSS will have responsibility for SIGINT collection, processing, analysis, and reporting operations and related mission and system resource management at each MGS. The DIRNSA/CHCSS will appoint a senior representative at each MGS to execute this responsibility, acting as Chief of (SIGINT) Operations. There are no prescribed limits on number of personnel assigned; they will be consistent with mission requirements in support of SIGINT customers and consistent within the limits imposed by funding, infrastructure, and good management practice.

c. (C//REL) NSA/CSS and NRO will share responsibility for MGS mission planning, training, and other activities in order to efficiently and effectively manage the MGS in the performance of its mission. Specific roles and responsibilities not otherwise designated within the MOA will be agreed upon separately for each MGS.

10.3. (S//TK//REL) An MOU between the NRO's Network Operations Group and NSA/CSS's Technology Directorate dated October 2010 describes the operational and maintenance responsibilities for NSA-specific communications equipment at RAINFALL.

10.4. (U//FOUO) Additionally, the following areas will adhere to NRO policy:

a. (U//FOUO) Financial Management. NRO will accept Military Interdepartmental Purchase Request funds from NSA/CSS for expenses incurred by NSA/CSS site personnel. Budget and travel policy, including Temporary Duty (TDY) and Rest &

Recuperation processing, will be executed consistent with Joint Federal Travel Regulations, the NSA/CSS Personnel Management Manual, State Department guidance, and site policy. TDY and PCS travel funded by NSA/CSS will follow established NSA/CSS guidelines.

b. (U//FOUO) All NSA/CSS civilian and military personnel assigned to site will be under the operational control of the COF for host responsibilities, ensuring compliance with applicable federal, state, and local environmental and safety laws and regulations and applicable host nation laws and regulations. Personnel management for NSA/CSS personnel assigned to site will be the responsibility of the COP. The COP, in conjunction with NSA/CSS, will ensure resource allocations are commensurate with the mission as tasked.

c. (U//FOUO) Property Management will be the responsibility of the NRO and NSA as appropriate.

---

**Proceed To:**

[NSA](#) | [Director](#) | [SID](#) | [SID Staff](#) | [SID Policy](#) | [USSID Index](#)

**Derived From:** NSA/CSSM 1-52

**Dated:** 8 January 2007

**Declassify On:** 20370801

---

**SECRET//TALENT KEYHOLE//  
REL TO USA, AUS, CAN, GBR, NZL**

**CLASSIFICATION GUIDE TITLE/NUMBER:** (U//FOUO) NSA/CSS  
Activities at Joint Defense Facility Pine Gap (JDFPG) 10-2

**PUBLICATION DATE:** 3 September 2009

**OFFICE OF ORIGIN:** (U) F78 Chief of Staff

**POC:** (U//FOUO) [REDACTED]

**ORIGINAL CLASSIFICATION AUTHORITY:** [REDACTED],  
Associate Director for Community Integration, Policy and Records

**Project Description:**

(U//FOUO) The organizational designator for the NSA/CSS activity at Joint Defense Facility Pine Gap (JDFPG) in Australia is F78 and the NSA/CSS unclassified coverterm for the activity is RAINFALL. JDFPG is near the town of Alice Springs, Northern Territory, Australia.

(S//TK//REL) The primary responsibility of the NSA/CSS activity at JDFPG is collecting, processing, analyzing, forwarding, and reporting SIGINT derived from the Mission 7600 and Mission 8300 collection systems.

(S//TK//REL) According to the 24 September 2008 Director, NRO memorandum: The NRO's classified name for the site is the Australian Mission Ground Station (AMGS); the NRO's UNCLASSIFIED name is Joint Defence Facility Pine Gap (JDFPG). Consult the NRO classification guide for guidance on NRO equities such as when associating JDFPG with the AMGS or SIGINT overhead mission numbers (e.g. 7605).

Description of Information	Classification/Markings	Reason	Declass	Remarks
1. (U//FOUO) The fact of an NSA/CSS presence at JDFPG.	UNCLASSIFIED//FOUO	N/A	N/A	
2. (U) The coverterm RAINFALL.	UNCLASSIFIED	N/A	N/A	

**SECRET//TALENT KEYHOLE//  
REL TO USA, AUS, CAN, GBR, NZL**

**SECRET//TALENT KEYHOLE//  
REL TO USA, AUS, CAN, GBR, NZL**

3. (U) The association of the coverterm RAINFALL with NSA/CSS.	UNCLASSIFIED	N/A	N/A	
4. (U//FOUO) The fact that RAINFALL is the coverterm for the NSA/CSS activity at JDFPG.	UNCLASSIFIED// FOR OFFICIAL USE ONLY	N/A	N/A	(U) The fact of an NRO presence at JDFPG is UNCLASSIFIED.
5. (C//REL) The fact that the Producer Designator Digraph (PDDG) for the NSA/CSS activity at JDFPG is ZZ.	CONFIDENTIAL// REL TO USA, AUS, CAN, GBR, NZL	1.4 (c)	25 years*	(C//REL) A PDDG is an alphanumeric digraph assigned to U.S. SIGINT System and Second Party elements that collect, process, and report transmitted, radiated, or emitted signals. While the association of the letters ZZ with JDFPG is not sensitive, the fact that that ZZ is a PDDG used by JDFPG must be protected in order to protect JDFPG's SIGINT mission.
6. (U//FOUO) The fact that the organizational designator for the NSA/CSS activity at JDFPG is F78.	UNCLASSIFIED// FOR OFFICIAL USE ONLY	N/A	N/A	
7. (C//REL) The fact that the SIGAD for the NSA/CSS activity at JDFPG is USJ-599.	CONFIDENTIAL// REL TO USA, AUS, CAN, GBR, NZL	1.4 (c)	25 years*	
8. (U//FOUO) The fact that the NSA/CSS activity at JDFPG has communications connectivity with other unspecified U.S. intelligence agencies and foreign partners.	UNCLASSIFIED// FOR OFFICIAL USE ONLY	N/A	N/A	(U) Details may be classified and/or compartmented.
9. (U//FOUO) The fact that the following message systems/circuits are used by the NSA/CSS activity at JDFPG: <ul style="list-style-type: none"> <li>• FOXTROT Circuit</li> <li>• GOLF Circuit</li> <li>• BOWGRACE</li> </ul>	UNCLASSIFIED// FOR OFFICIAL USE ONLY	N/A	N/A	(U) Details may be classified and/or compartmented.  (C//REL) Any reference to use of the named circuits for SIGINT purposes shall be classified accordingly. See item 11.
10. (U) The fact that the USAF detachment at JDFPG provides administrative support to U.S. Air Force Technical Applications Center (AFTAC) DET 421 personnel.	UNCLASSIFIED	N/A	N/A	(C//REL) AFTAC DET 421 personnel do not support JDFPG's SIGINT mission.
11. (C//REL) The fact of a SIGINT mission at JDFPG.	CONFIDENTIAL// REL TO USA, AUS, CAN, GBR, NZL	1.4 (c)	25 years*	(U) Details may be more highly classified and/or compartmented.

**SECRET//TALENT KEYHOLE//  
REL TO USA, AUS, CAN, GBR, NZL**

**SECRET//TALENT KEYHOLE//  
REL TO USA, AUS, CAN, GBR, NZL**

12. (C//REL) The fact that the SIGINT mission at JDFPG includes Signals Development (SIGDEV) work on a variety of unspecified signals.	CONFIDENTIAL// REL TO USA, AUS, CAN, GBR, NZL	1.4 (c)	25 years*	(U) Details may be more highly classified and/or compartmented.
13. (C//REL) The fact that the SIGINT mission at JDFPG includes performing off-line and on-line signals analysis on collected signals.	CONFIDENTIAL// REL TO USA, AUS, CAN, GBR, NZL	1.4 (c)	25 years*	
14. (U//FOUO) The fact that the NSA/CSS activity at JDFPG supports Personnel Recovery (PR) and Combat Search and Rescue (CSAR) operations.	UNCLASSIFIED// FOR OFFICIAL USE ONLY	N/A	N/A	(C//REL) Without reference to SIGINT.
15. (S//REL) The fact that the NSA/CSS activity at JDFPG collects, with SIGINT assets, distress voice signals, data signals, [REDACTED] [REDACTED] [REDACTED]	SECRET// REL TO USA, AUS, CAN, GBR, NZL	1.4 (c)	25 years*	
16. (U//FOUO) The fact that the NSA/CSS activity at JDFPG supports a specific military operation (e.g. OPERATION ENDURING FREEDOM; OPERATION IRAQI FREEDOM) when no details of that support are revealed.	UNCLASSIFIED// FOR OFFICIAL USE ONLY	N/A	N/A	(C//REL) Any reference SIGINT support shall be classified accordingly. See item 11.  (U) Details may be classified and/or compartmented.  (U) The fact that the NSA/CSS activity at JDFPG supports military operations in general is also UNCLASSIFIED//FOR OFFICIAL USE ONLY.
17. (S//REL) The fact that the NSA/CSS activity at JDFPG provides SIGINT support to NATO operations.	SECRET// REL TO USA, AUS, CAN, GBR, NZL	1.4 (c)	25 years*	(S//REL) The NSA/CSS activity at JDFPG may provide SIGINT support to a NATO operation, military or non-military, regardless of whether the U.S. is directly involved in the operation.  (U) Details may be more highly classified and/or compartmented.
18. (U//FOUO) The fact that the	UNCLASSIFIED//	N/A	N/A	

**SECRET//TALENT KEYHOLE//  
REL TO USA, AUS, CAN, GBR, NZL**

**SECRET//TALENT KEYHOLE//  
REL TO USA, AUS, CAN, GBR, NZL**

NSA/CSS activity at JDFPG has Operations, Support, and Engineering sections.	FOR OFFICIAL USE ONLY			
19. (C//REL) The fact that the following types of training are conducted at the NSA/CSS activity at JDFPG: <ul style="list-style-type: none"> <li>• SIGINT/Intelligence training</li> </ul>	CONFIDENTIAL// REL TO USA, AUS, CAN, GBR, NZL	1.4 (c)	25 years*	
20. (U//FOUO) The fact that the following types of training are conducted at the NSA/CSS activity at JDFPG: <ul style="list-style-type: none"> <li>• Information Assurance training</li> <li>• OPSEC training</li> </ul>	UNCLASSIFIED// FOR OFFICIAL USE ONLY	N/A	N/A	

\* (U) Declassification in 25 years indicates that the information is classified for 25 years from the date a document is created or 25 years from the date of this original classification decision, whichever is later.

**SECRET//TALENT KEYHOLE//  
REL TO USA, AUS, CAN, GBR, NZL**

<b>Organizational / MGS Associations</b>										
	CDMGS	ADF	FSD	PMGS	MSF	CWRTC	HMGS	RAF MHS	AMGS	JDFPG
NRO	S//TK	S//TK	S//TK	S//TK	S//TK	S//TK	S//TK	S//TK	S//TK	S//TK
CIA	S//TK	S//TK	S//TK	S//TK	S//TK	S//TK	S//TK	S//TK	S//TK	S//TK
NSA	S//TK	U//FOUO	U//FOUO	S//TK	U//FOUO	U//FOUO	S//TK	U	S//TK	U//FOUO
NGA	S//TK	U//FOUO	U//FOUO	S//TK	U//FOUO	U//FOUO	S//TK	U//FOUO	S//TK	U//FOUO
This table is S//TK										

5.1 (S//TK) The following are current NRO/MGS:

**The fact that the NRO uses cover stories is SECRET.**  
**The specifics of any cover story are classified. However, the level of classification varies.**  
**Most NRO Mission Ground Stations cover stories are classified SECRET//TALENT KEYHOLE.**  
**Ground Stations are by their nature complex facilities, often with equally complex classification issues.**  
**Specific classification questions about each MGS should be directed to the on-site security office.**

5.1.1 (S//TK) Australian Mission Ground Station (AMGS)

5.1.1.1 (U) Facility Name: Joint Defense Facility/Pine Gap (JDF/PG)

5.1.1.2 (S//TK) **Cover Story:** The fact that the unclassified mission statement for JDF/PG is a cover story is S//TK, the cover story itself is unclassified.

*(U) The Joint Defense Facility Pine Gap (JDFPG) is a joint US/Australian defense facility whose function is to support the national security of both the US and Australia. The JDFPG contributes to verifying arms control and disarmament agreements and monitoring of military developments. The JDFPG is jointly staffed by US and Australian DoD civilians and members of the various military branches.*

5.1.1.3 (S//TK) Unique association occurrences:

1. The term Joint Defence Facility Pine Gap (JDFPG)=**UNCLASSIFIED**.  
Note: No association with the NRO.
2. The term Australian Mission Ground Station (AMGS)=**S//TK**.
3. Fact that the NRO has a MGS at JDFPG=**S//TK**.
4. Fact that the JDFPG is the SBIRS Pacific Relay Ground Station location=**UNCLASSIFIED**. Note: No association with the NRO.
5. Association of NSA personnel with JDFPG=**U//FOUO**. Note: No association with the NRO.
6. Association of CIA personnel with JDFPG=**S//TK**.