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HISTORY OF SAC RECONNAISSANCE OPERATIONS, FY 74 (U)

HISTORICAL STUDY

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OFFICE OF THE HISTORIAN
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Leonid A. Brezhnev, and the United Nations (UN) Security Council, Egypt, and Israel agreed to a UN resolution calling for a ceasefire in place on 22 October 1973.

(U) The Egyptian-Israeli disengagement pact signed on 18 January 1974 was a more positive step toward achieving stability in this world trouble spot. Resulting primarily from the mediation efforts of Secretary Kissinger, the disengagement pact, in brief, required Israeli forces to abandon their bridgehead on the western banks of the Suez Canal and to withdraw their forces to a 7-1/2 mile zone 14 to 20 miles east of the canal and west of the Gidi and Mitla Passes. Concurrently, Egyptian forces were to remain on the east bank in a five to 7-1/2 mile zone.

(U) Fighting of varying severity continued between Israel and Syria until May 1974. Intensified hostilities broke out between the Israelis and Syrians in March 1974 along the Golan Heights. On 31 May 1974, however, after 32 days of shuttle diplomacy by Kissinger, Israel and Syria agreed formally to terminate the fighting on the Golan Heights. This was the first armistice between the two countries since Israel's 1948 war for independence. In signing the agreement, Israel consented to give up Syrian territory captured during the October 1973 war, plus a strip on the Golan Heights taken during the "seven-day" war in 1967.

U (S) As a result of the crisis, national intelligence users at the highest levels of government required high resolution photography of the Middle East for two reasons. First, the United States wanted to determine if and to what degree the Soviet Union was supplying and resupplying the Arabs, a condition that threatened to lead to a third world war. Second, in its continuing efforts to promote peace, it needed photo intelligence after the signing of the disengagement pacts to insure that all parties were complying with the terms of the agreements. In satisfaction of these requirements, first the SR-71 and then the U-2R played important roles.

GIANT REACH/BUSY PILOT

U (S) For much of FY 74, the Middle East was an area in which most reconnaissance aircraft could not fly without risk of destruction

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by surface-to-air missiles. This environment precluded the operation of the vulnerable U-2 and tactical reconnaissance aircraft. The unmanned drone could fly in heavily defended areas, but considerable advanced warning was needed before drones and their supporting assets could be deployed to a Mediterranean operating location.

U (S) When the Arab-Israeli war broke out, Headquarters SAC had already prescribed guidelines for the SR-71 to operate in this high-threat area under the nickname GIANT REACH. This plan required the SR-71 to launch from Beale AFB, California, and then recover at RAF Mildenhall, United Kingdom, where it would remain for additional flights.³⁵ Regrettably, this pattern of operations could not be carried out in FY 74. Throughout the year, political objections by the British and Turkish governments prevented the SR-71 launching from the United Kingdom or its supporting tankers from refueling the mission aircraft directly from Incirlik AB, Turkey, where the SR-71's special JP-7 fuel was stored.³⁶

U (S) These circumstances and the urgent need for Middle East photo intelligence called for a reconnaissance aircraft that could launch and recover from a base in the continental United States (CONUS). Only the SR-71 flying at Mach [] and possessing a refueling capability could take off from the United States, cover a target area nearly 6,000 nautical miles away, and then recover at its original CONUS base. 7

U (S) In October 1973, the SR-71 Advanced Systems Program Office (ASPO) at Norton AFB, California, was preparing to test SR-71 antenna radiation patterns from Griffiss AFB, New York. Some SR-71 equipment was already in place there. Because of this and due to Griffiss' geographical location, Headquarters SAC decided that Griffiss was the best place from which to conduct GIANT REACH missions round-robin to the Middle East. On 11 October 1973, the JCS directed SAC to deploy two SR-71s,* equipment, and necessary support personnel (about

* U (S) One of the SR-71s was used as a spare for each operational sortie. In the event the mission aircraft had to abort, the spare could take over the mission. It sometimes launched after the primary aircraft, usually about one hour after the mission aircraft took off. On other occasions the spare aircraft did not launch.

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75 officers, airmen, and civilians) to Griffiss and await instructions to fly SR-71 photo-reconnaissance operations in the Middle East.³⁷

To provide the necessary refueling support, Headquarters SAC simultaneously deployed 12 KC-135Q tankers, all assigned to the 456th BMMW at Beale AFB, to four locations. Three went to Griffiss, while four and five KC-135Qs were sent respectively to SAC's tanker task forces at Goose AB, Labrador, and Torrejon AB, Spain. They supplemented KC-135Qs already assigned to the Goose and Torrejon tanker organizations.³⁸

U (S) The JCS directed Headquarters SAC to execute the first GIANT REACH photo-reconnaissance mission on 13 October 1973.³⁹ Targets designated for priority coverage were airfields in Egypt, Syria, Israel, and the Golan Heights region of Syria.⁴⁰ The mission aircraft launched from Griffiss at 0600Z and recovered at 1713Z on the same day. Total airborne time was 11 hours, 13 minutes.⁴¹ This exceeded the longest SR-71 sortie to date, one of 10 hours, 30 minutes conducted on 26 April 1971 to confirm the design limitations of the SR-71 in duration and distance.⁴² Time over the Middle East target area was 37 minutes (1102Z to 1139Z) and 90 percent of the intended targets were successfully covered.⁴³ Lt Col J. H. Shelton, Jr. (pilot) and Lt Col G. L. Coleman (reconnaissance systems officer) made up the crew on the first mission.⁴⁴

U (S) The 13 October mission required six aerial refuelings (two tankers each) in the following areas: (1) Gulf of St. Lawrence (Old Barge E.); (2) off the coast of Portugal (Rota E.); (3) south of Crete (Crete E.); (4) south of Crete (Crete W.); (5) off the coast of Portugal (Rota W.); and (6) Gulf of St. Lawrence (Old Barge W.). Fourteen KC-135Qs flew in support of this mission: four from Goose AB, two from Griffiss, and eight from Torrejon.⁴⁵

U (S) Two of the Goose tankers recovered directly at Loring AFB, Maine, while the two KC-135Qs that had actually refueled the mission aircraft over the Gulf of St. Lawrence on the first leg flew directly

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to Little Rock AFB* to pickup additional JP-7 before flying to Loring for further staging. One of the Griffiss tankers went to Little Rock after refueling the SR-71 on the Old Barge W. track and took on JP-7 before recovering at Griffiss. Although political sensitivity prevented the tankers launching from Incirlik in support of the GIANT REACH mission, they could recover at Incirlik after refueling the SR-71. Thus, six of the Torrejon-based tankers flew to Incirlik after refueling the SR-71, unloaded JP-7, and returned to Torrejon.⁴⁶

U (S) SAC conducted nine GIANT REACH/BUSY PILOT missions during FY 74. The first four launched from Griffiss AFB, New York, and the remainder flew from Seymour Johnson AFB, North Carolina (all nine sorties are summarized in Table 3 on following page). The Strategic Reconnaissance Center varied the tracks and time over targets for each mission so that the Middle East combatants' radars would be unable to detect any predictable pattern of operations.⁴⁷ On all missions the SR-71 took off either very late at night or quite early in the morning in order to reach the Middle East at a time when sun angles were the best for collecting high resolution, aerial photography.⁴⁸

U (S) Targets on the nine sorties were basically the same although priorities varied. The major countries of interest were always Egypt, Israel, and Syria. Since the Middle East was a relatively small target area for the SR-71 to cover, it could not help collecting some photography of Lebanon, Iraq, and Jordan when negotiating turns. Time over target varied from a low of 29 minutes on the 7 March 1974 sortie to a high of 82 minutes on the 6 April 1974 mission.⁴⁹

U (S) The SR-71 photography provided valuable information about the type, disposition, and quantities of military supplies furnished the Egyptians and Syrians by the Soviet Union. Highest priority objectives on all missions included the areas along either side of the Suez Canal, the Golan Heights region between Israel and Syria,

* U (S) In the United States JP-7 was stored only at Beale, Castle, Edwards, and Little Rock AFBs and at Lockheed Aircraft Corporation's facility at Palmdale, California. Little Rock was the JP-7 storage area nearest to Griffiss.

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GIANT REACH/BUSY PILOT MISSIONS SUMMARY (U)⁵⁰

Table 3

Date	Operating Location	Acft	Track	Planned Time	Takeoff Time	Landing Time	Total Time	Total Mileage
13 Oct 73	Griffiss AFB	#979	XAC02	11:10.5	0600Z	1713Z	11:13	11,879
	Refueling Tracks	1) Old Barge E.	2) Rota E.	3) Crete E.	4) Crete W.	5) Rota W.	6) Old Barge W.	
	KC-135qs Off-Loading	1	2	2	2	2	1	
25 Oct 73	Griffiss AFB	#979	XAC05	11:14.4	0600Z	1713Z	11:13	11,859
		1) Busy Ralph E.	2) Lajes E.	3) Crete E.	4) Crete W.	5) Lajes W.	6) Busy Ralph W.	
		1	2	2	2	2	1	
04 Nov 73	Griffiss AFB	#979	XAC07	11:18.7	0600Z	1722Z	11:22	11,973
		1) Busy Ralph E.	2) Lajes E.	3) Crete E.	4) Crete W.	5) Lajes W.	6) Busy Ralph W.	
		1	2	2	2	2	1	
11 Nov 73	Griffiss AFB	#964	XAC08	10:33	0600Z	1649Z	10:49	12,181
		1) Busy Ralph W.	2) Atlantis E.	3) Crete E.	4) Crete W.	5) Atlantis W.		
		1	2	2	2	2		
02 Dec 73	Sey Johns AFB	#964	XAC09	9:58	0500Z	1456Z	9:56	12,320
		1) Busy Chip E.	2) Atlantis E.	3) Crete E.	4) Crete W.	5) Atlantis W.		
		1	2	2	2	2		
10 Dec 73	Sey Johns AFB	#979	XAO10	10:00	0430Z	1432Z	10:02	12,320
		1) Busy Chip E.	2) Atlantis E.	3) Crete E.	4) Crete W.	5) Atlantis W.		
		1	2	2	2	2		
25 Jan 74	Sey Johns AFB	#971	XAO11	9:52	0430Z	1434Z	10:04	12,147
		1) Busy Chip E.	2) Atlantis E.	3) Crete E.	4) Crete W.	5) Atlantis W.		
		1	2	2	2	2		
07 Mar 74*	Sey Johns AFB	#979	IAO01	9:43	0430Z	1415Z	9:45	11,865
		1) Busy Chip E.	2) Atlantis E.	3) Crete E.	4) Crete W.	5) Atlantis W.		
		1	2	2	2	2		
06 Apr 74*	Sey Johns AFB	#979	IAC02	9:55	0400Z	1348Z	9:48	12,220
		1) Busy Chip E.	2) Atlantis E.	3) Crete E.	4) Crete W.	5) Atlantis W.		
		1	2	2	2	2		

* (S) Flown in a permissive environment, these sorties were called BUSY PILOT. After the signing of the Egyptian-Israeli disengagement pacts, SAC used the BUSY PILOT nickname to denote SR-71 photo-reconnaissance missions confined exclusively to the disengagement zones on either side of the Suez Canal.

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surface-to-air missile sites, and Egyptian, Syrian, and Israeli ports and airfields.⁵¹ After the disengagement pacts were signed in January 1974, photography was concentrated on the Egyptian-Israeli lines on either side of the Suez Canal to determine if each side was living up to the agreement. Following disengagement both countries consented to the year's remaining GIANT REACH/BUSY PILOT missions, and they received copies of the photography.⁵²

U (~~S-SENIOR CROWN~~) The SR-71 carried five camera systems on these overflights. The terrain objective camera (TROC), two operational objective cameras (OOC), and the optical bar camera (OBC) mounted in the nose section, collected broad area photography, while the technical objective camera (TEOC) was programmed prior to flight to photograph specific targets at designated locations.⁵³ The OBC was a stereo-capable, panoramic camera with an optimum resolution [] It was the primary sensor used on the GIANT REACH/BUSY PILOT missions.⁵⁴ Since this camera was designed for broad area coverage, the number of bonus targets photographed always exceeded the number of targets programmed for pinpoint coverage by the technical objective camera.⁵⁵

U (S) That each of the SR-71 round-robin flights to the Middle East required five or six mid-air refuelings was one of the most significant aspects of the entire operation. Providing support from several locations, two KC-135Qs offloaded JP-7 at each refueling, a procedure which placed an immense stress on the SR-71 pilot who had to descend from supersonic altitude to about 30,000 feet to hookup with the tankers. Since one or two spares, either flying or on strip alert, always backed up the two tankers actually refueling the SR-71, usually about 16 KC-135Qs were needed to support each Middle East sortie.⁵⁶

U (S) Because operations had to be conducted round-robin from the United States and because of restrictions on tanker operations from Incirlik, the size of the tanker force originally specified by Headquarters SAC nearly doubled.⁵⁷ Additionally, the need to move JP-7 from storage at Incirlik and Little Rock to the bases where the Qs

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operated required extensive ferrying operations. During each mission, several offloading tankers proceeded to the storage areas and took on JP-7 before returning to their home operating bases either in the United States or at Torrejon. Sometimes the tankers deployed to these sites from their operating bases solely for the purpose of picking up JP-7. In the course of the nine GIANT REACH/BUSY PILOT missions conducted during FY 74, KC-135s operated at various times from Goose, Loring, Griffiss, Seymour Johnson, and always from Torrejon, the launch site for SR-71 refuelings in the Mediterranean and Eastern Atlantic areas.⁵⁸

U(S) Political repercussions after the first mission resulted in an alteration of refueling tracks for the second flight, conducted on 25 October 1973. During the initial mission, the Spanish Air Defense Radar had detected the Torrejon-based KC-135Qs refueling the SR-71 off the Portuguese coast. After the Spanish government protested this to the American Embassy in Madrid, the east and westbound GIANT REACH Atlantic refueling tracks were redrawn so that the second and fifth refueling legs would take place beyond the range of the Spanish radars.⁵⁹ To replace the Portuguese coastal tracks, Rota East and Rota West, the Strategic Reconnaissance Center developed new refueling tracks off the coast of the Azores and renamed them Lajes East and Lajes West. Both had a common air refueling control point (ARCP) of 4050N and 2155W.⁶⁰

U(S) In expectation that the Soviet Union might deploy personnel and materiel to the Arabs, priority 1 objectives on the second GIANT REACH mission, flown on 25 October 1973, were the port facilities at Latakia and Tartus in Syria and Port Said and Alexandria in Egypt. Since Egypt and Israel had signed a ceasefire agreement on 22 October 1973, another purpose of this mission was to determine the extent of the Israeli thrust across the canal and to confirm the precise location of the Israeli, Egyptian, and Syrian fronts. To do this, the SR-71 was required to photograph an area 20 NM west and 10 NM east of the Suez Canal.⁶¹

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U(1/2) Sixteen airborne KC-135Q tankers supported the second GIANT REACH mission for which the total mission time of 11 hours, 13 minutes was identical to the first sortie. With four tankers now deployed to Loring, the first and last refueling legs were moved from the Gulf of St. Lawrence to an area south of Nova Scotia. Six refuelings were accomplished in the following areas: (1) south of Nova Scotia (Busy Ralph E.); (2) north of the Azores (Lajes E.); (3) south of Crete (Crete E.); (4) south of Crete (Crete W.); (5) north of the Azores (Lajes W.); and (6) south of Nova Scotia (Busy Ralph W.).⁶²

U(1/2) Although the Joint Chiefs of Staff had directed SAC to conduct the third GIANT REACH mission on 2 November 1973, poor weather in the target area caused it to be postponed for two days.⁶³ The third GIANT REACH sortie, flown on 4 November 1973, was noteworthy because it exceeded by nine minutes the longest SR-71 flights ever conducted, these being the first two GIANT REACH missions of 13 and 25 October 1973.⁶⁴

U(1/2) Total time for the 4 November sortie was 11 hours, 22 minutes and, at the end of FY 74, this was still the longest SR-71 flight on record.⁶⁵ National intelligence users required somewhat different coverage on this mission. In addition to photography of the Suez Canal, Port Said, and the Golan Heights, the Syrian ports of Latakia and Tartus, the Cairo International Airfield, and the port of Alexandria were designated priority 1 items, again in expectation that the Soviets were deploying men and materiel to Egypt after the ceasefire. An additional high priority objective was the Tura cave facilities near Cairo, believed to contain Soviet SCUD B transportable missiles.⁶⁶

U(1/2) By November 1973, the advent of winter at Griffiss threatened to complicate SR-71 operations from this SAC-owned base in upstate New York.⁶⁷ Although it could operate in virtually any temperature when airborne, the SR-71's petroleum and lubricants became solid

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