Lessons from the Capture of the USS *Pueblo* and the Shootdown of a US Navy EC-121—1968 and 1969

Richard A. Mobley

This article is UNCLASSIFIED in its entirety.

The two incidents are best considered together because they reveal related systemic flaws in indications and warning, intelligence analysis, military planning, and command and control. Since 2010, the National Security Agency (NSA) has released more than 200 documents that provide new evidence and reinforce lessons for intelligence from North Korea's seizure in international waters of the USS *Pueblo* (AGER-2) in January 1968 and its subsequent shootdown in April 1969 of a Navy EC-121 signals intelligence (SIGINT) aircraft with 31 crewmen aboard.^a

The documents and associated information gained from NSA oral histories and interviews do not fundamentally alter the broad outlines of our understanding of either incident, but they advance the story by providing more evidence on Pueblo's SIGINT capabilities and targets, warning, North Korea's conduct of the attack, and the resulting damage assessment. In the case of the EC-121 shootdown, a newly released NSA history of the event provides previously unpublished details about how a single North Korean Air Force (NKAF) MiG-21 Fishbed fighter downed the EC-121 and about challenges in the aircraft warning

process.¹ Although some of the documents have been modestly redacted, when pieced together they tell a consistent story about both crises.

The two incidents are best considered together because they reveal related systemic flaws in indications and warning, intelligence analysis, military planning, and command and control. Many of the same US national and theater decisionmakers and intelligence staffers participated in both incidents. Moreover, internal lessons-learned discussions and contemporary congressional testimony treated the incidents in parallel.^b

Rather than reconstruct events that have been thoroughly discussed in a raft of books and articles, I will in this article address questions best answered by the new evidence.

The View from Pyongyang

The North Koreans had long been sensitive to ships and aircraft operating off their coasts, and since 1966 they had attempted to assassinate South Korean leaders and sharply increased their raids across the

a. NSA has posted documents in the collection on its website at www.nsa.gov. Interviews and research contained in Jack Cheever's recent, eminently readable book on the *Pueblo* incident (*Act of War*, Penguin, 2014) supplement the story. The Intelligence Officer's Bookshelf review of the book appears on page 89 of this issue.

b. See the author's *Flashpoint North Korea: the* Pueblo *and EC-121 Crises* (U.S. Naval Institute Press, 2003) for a detailed treatment of linkages between the incidents.

All statements of fact, opinion, or analysis expressed in this article are those of the author. Nothing in the article should be construed as asserting or implying US government endorsement of its factual statements and interpretations.



Demilitarized Zone to a total of 435 violent incidents, causing 775 North Korean, South Korean, and UN casualties.² The North Korean Navy (NKN) reacted to any South Korean naval unit or fishing vessel near its coasts, and in January 1967, North Korean artillery sank a South Korean naval vessel. The NKAF in April 1965 severely damaged a US Air Force RB-47 flying about 40 miles from the North Korean coast and had since been working on intercept techniques-including using air-to-air missiles-against US reconnaissance aircraft.3

Pyongyang's decisionmaking was so opaque that contemporary US intelligence assessments and policymakers could only speculate on the North's motivations for seizing the *Pueblo* or shooting down the EC-121. The State Department in 1968 wrote, "North Korea is the most denied of denied areas and the most difficult of all intelligence targets. Estimates of North Korean strength, intentions, and capabilities, therefore, cannot be made with a high degree of confidence."⁴

Possible North Korean motivations included a desire to overthrow the South Korean government (and eventually create a unified Korea under Kim Il Sung) by fomenting crises on the peninsula; competition within the North Korean regime in which a hardline faction of generals was attempting to demonstrate that its heavy investments in advanced military equipment was paying off; the DPRK's nationalist sensitivity to maintaining its territorial boundaries; and Pyongyang's attempts to compete with growing South Korean military involvement in South Vietnam by demonstrating military

prowess against the United States and South Korea.

The US military took sweeping steps—many unpublicized—to prepare for a war with Pyongyang but ultimately relented with a publicly repudiated written apology that freed the crew in December 1968.⁵ US retaliation was stayed by the primary motivation of securing the safe return of the *Pueblo* crew as well as a desire to avoid a second major war, particularly when the Vietnam War had intensified with the Tet Offensive in January 1968.

The State Department's Korea Task Force in March 1968—after weeks of US military posturing and contingency planning—concluded that "available military action would be mere pin-pricks unlikely to move North Koreans, and would probably prejudice chances of getting men back."⁶ Other factors included the growing antiwar sentiment in the United States and a lack of forces and plans immediately available to rescue the ship.

The lesser-known EC-121 shootdown-the Nixon administration's first crisis outside the context of the war in Southeast Asia-occurred on 15 April 1969 when an NKAF Fishbed fighter downed a Navy aircraft belonging to Fleet Air Reconnaissance Squadron One (VQ-1) while the plane was orbiting on a SIGINT mission in international airspace about 80 miles off North Korea. The theater commander was again caught with inadequate retaliatory plans and Seventh Fleet again marshaled forces in the Sea of Japan for potential contingency operations.7 Washington ultimately did not retaliate in either incident, however, and North Korean

press today continues to trumpet both incidents as badges of national honor.

Pueblo: Inadequate Preparedness Undermined Capabilities

USS Pueblo's seizure and loss of significant quantities of classified material are reminders that even the most advanced collection systems will not compensate for inadequately trained or prepared intelligence personnel. Members of the Naval Security Group Signals Intelligence Detachment aboard Pueblo were poorly prepared for aspects of their basic collection duties as well as for emergency destruction, shortfalls that denied Pueblo's commanding officer even limited tactical warning, conspired with the meager midwinter SIGINT collection environment off the DPRK to contribute to limited SIGINT "take," and allowed the NKN to seize over 500 highly classified intelligence documents and pieces of cryptographic equipment.8

What were Pueblo's SIGINT capabilities?

Pueblo was equipped with the latest and most sophisticated SIGINT collection equipment then in the US inventory, with a capability to intercept and record North Korean voice and other communications particularly in the ultra high frequency (UHF) and very high frequency (VHF) spectrums.⁹ It had the standard WLR-1 electronic intelligence intercept receiver used throughout the fleet and had positions set aside to intercept Soviet telemetry.^{10, 11}

Unfortunately, the embarked Naval Security Group detachment was "not as well trained and ready as it should have been," according to the endorsement written by Adm. John Hyland (then commander in chief of the Pacific Fleet) in May 1969 on the report by the naval board of inquiry investigating the *Pueblo* incident.¹² He added that the detachment was not primarily oriented toward North Korea¹³ (*Pueblo*'s first mission)—a factor that may have contributed to the detachment's unpreparedness.

The ship would gain little insight or warning from monitoring the North's clear-voice communications because the rusty language skills of two Korean linguists belatedly assigned to the ship's SIGINT detachment were not up to the job of rapidly translating fast-moving tactical traffic. At a tactical level, NSA observed that had the linguists been qualified they would have understood a full 20 minutes before the first shots were fired at *Pueblo* that North Korean patrol boats were maneuvering to fire.¹⁴

Despite Pueblo's remarkable electronics suite, almost all communications intelligence (COMINT) insights into the incident were unavailable for hours or days after the seizure; instead collection acquired and analyzed by shore-based installations and airborne platforms had to be used.¹⁵ The Naval Security Group detachment at Kami Seya, Japan (USN-39) did the Pueblo a major disservice by failing to properly screen its personnel and consequently sending unqualified linguists on a sensitive collection mission. The Navy justifiably faulted personnel on board the ship for failure to plan and train for emergency destruction of their extensive holdings.

What was Pueblo supposed to monitor?

AGER-2 primarily was assigned to fulfill Navy collection requirements, but NSA also provided it secondary priority tasking. USS Pueblo usually would not be assigned to duplicate collection from shore-based sites, according to NSA's internal memoranda.¹⁶ Rather, a ship with *Pueblo*'s capability would be particularly useful against communications in the VHF spectrum, which tended to be line-of-sight and best intercepted when the platform was close to the target. The DPRK used low-powered VHF transmitters, NSA noted, so a ship like Pueblo might be able to collect against them given the ship's proximity to the coast.17

Pueblo was to conduct a general search for NKN and North Korean Army (NKA) use of VHF communications by units along the east coast of Korea.¹⁸ *Pueblo* also was to investigate alternate North Korean communications pathways since North Korea's use of the VHF spectrum had declined.^{19,20} *Pueblo* also afforded long-dwell capabilities against targets that SIGINT aircraft could monitor for only a few hours at a time.²¹

NSA requested that *Pueblo* conduct a general collection effort against NKA, NKN, and NKAF communications to help create a database and determine the location of certain emitters. For example, the ship was supposed to intercept all NKA clearvoice coastal artillery activity. It was to monitor all NKN single-channel voice communications including shipship and ship-shore communications.²²

To put this in context, the Korean People's Army (NKA) then used manual Morse, radiotelephone, and radio-printer communications. All echelons of the chain of command used manual Morse and radiotelephone for standby communications. The three major east coast NKN units used manual Morse and radiotelephone for ship-shore, shore-ship, and ship-ship communications.²³

NSA assigned electronic intelligence (ELINT) guidance in the following priority order: new/unusual/unidentified signals, unconfirmed signals, and landbased/shipborne/ airborne radars. AGER-2 was to use its direction-finding capability to map the North's electronic order of battle. Collection against more than seven emitters associated with antiship cruise missiles and Komar missile boats understandably enjoyed high priority.²⁴

How much intelligence information was compromised by Pueblo's seizure?

Admiral Hyland wrote in June 1969 that the "tragedy of the Pueblo" was that the "compromise of sensitive information can very well be turned against the United States and ultimately cause the loss of untold lives in other confrontations."25 The newly released material reveals part of the basis for his concerns, although at the time neither he nor the damage assessment team were aware of the potential that the cryptographic hardware captured aboard Pueblo might be married up with keying material being provided to the Soviet Union by the Walker spy ring starting in 1967 26

The NSA histories and assessments provide stunning detail about the extent of compromise gained from exploiting the ship's vast holding of SIGINT material, and

Studies in Intelligence Vol 59, No. 1 (Extracts, March2015)

brutal, informed interrogation of crewmen with cryptologic expertise. NSA concluded that the majority of material aboard the AGER—perhaps as much as 80 percent of document holdings and 95 percent of cryptologic equipment—survived the ship's hurried, chaotic emergency destruction effort.²⁷

The ship had carried more than 500 documents or pieces of equipment, including 58 technical SIGINT instructions, 37 technical manuals, 33 COMINT technical reports and 126 collection requirements. Pueblo had copied about 8,000 messages containing SIGINT data transmitted over the fleet operational intelligence broadcast. The broadcast carried large amounts of information on Southeast Asia and China and thus collectively revealed the effectiveness of US collection efforts.²⁸ The Pueblo also used four cryptographic systems, associated keying materials, maintenance manuals, operating instructions, and the general communications-security publications necessary to support a cryptographic operation. 29

NSA reported that highly competent North Korean electronics experts intensively interrogated communications technicians (CTs) among the crew, focusing on technical principles of the cryptographic equipment, equipment operating procedures, and the relationship of the associated keying material to the equipment.^{30, 31} The North interrogated some of the CTs as many as 20 times in sessions lasting hours, according to the Cheevers account.32 Some of the CTs explained in detail how to change codes for and operate KW-7 encrypted teletypes and drew schematics of the KWR-37 gear used to copy the enciphered fleet

broadcast.³³ The assistance saved the North three to six months of technical diagnostic analysis, according to NSA's conclusion.³⁴

NSA judged that the compromise revealed "the full extent of US SIGINT information on North Korean armed forces communications activities and US successes in the techniques of collection, exploitation, and reporting applied to this target."35 The material detailed the full extent of the American SIGINT attack on North Korean communications, including call-sign system recoveries, net and communications system reconstruction and diagrams, and the association of communications systems with platforms and transmission systems.36

Ambiguous Warning Ineffectual in Both Incidents

Military commanders before both incidents were aware of anomalous North Korean behavior but were not moved to cancel the missions. Theater commanders in *Pueblo*'s case assumed that the DPRK—like the Soviet Union—would respect international legal protections for operating in international waters and judged that they could manage the risk to reconnaissance aircraft posed by unusual NKAF activity by directing aircrews to remain 50 miles, rather than 40 miles, from the North Korean coast.³⁷

NSA, internally conflicted over the degree of risk the *Pueblo* mission posed and the appropriateness of sharing its concerns with the military, ultimately released a "background" message to the military on 29 De-

cember 1967 chronicling North Korean provocations against ships and aircraft previously operating off its coasts. The word "warning," however, never appeared in the message.

Moreover, NSA's chain of command added language suggesting the message was only "informational" and restricted the message's distribution.³⁸ Had NSA packaged the same information differently, it probably would have provided enough to make the case for stopping *Pueblo*'s dangerous mission in its tracks, or at least forcing the military to reconsider the "minimal risk" assessment that was rapidly rubber-stamped on the mission proposal. Essentially, NSA's message represented a warning opportunity missed.

NSA transmitted its message to the JCS Joint Reconnaissance Center highlighting North Korea's historical sensitivity to surveillance aircraft and ships operating off its coasts. It noted that the North was "extremely sensitive" to peripheral reconnaissance flights, did not recognize international boundaries in the air, and reacted to South Korean fishing vessels. In addition to not using the word "warning," it said there was no evidence of provocative or harassing activities by North Korean vessels beyond 12 miles from the coast.³⁹

The odd nature of the message, which was sent near the end of the risk-assessment process in Washington, reflected divisions within NSA over how to assess the threat, a reluctance to question the Navy's deployment proposal, and a maladroit marketing of SIGINT product, according to NSA's oral and written histories. The *Pueblo* advisory message had a predecessor. NSA in early 1967 had sent a message to the Joint Chiefs of Staff and a large number of Navy commands advising that the DPRK might act against the USS *Banner* (AGER-1), *Pueblo*'s sister ship, during an impending mission off the North.⁴⁰ The Navy conducted the patrol despite the advisory, leading to "very high frustration" among the NSA analysts, since no one seemed to have "read our product."⁴¹ In any event, the North did not react to *Banner*'s operations.

Eugene Sheck, then chief of NSA's mobile collection organization (K17) and an NSA officer who had helped plan the *Pueblo* mission, said in a subsequent, declassified oral history that a junior analyst who felt *Pueblo*'s mission was too dangerous drafted a strident warning and recommended that the patrol be cancelled. Seeking to avoid interfering in a collection mission under Navy operational control, the message was watered down as it worked its way up NSA's review chain, according to Sheck.⁴²

In fact, the final version of the conclusion of the message said, "The above is not intended to reflect adversely on CINCPACFLT deployment proposal," a phrase added to make the message less obtrusive, according to NSA's history of the incident.43 The message originally was to go to the same addressees who received the Banner advisory, but distribution was restricted during the coordination process.44 The NSA history concluded that NSA "could not have done anything more beyond this message and remain within the parameter of its mission without running the risk of being accused of meddling in Navy affairs."45

NSA analysts later judged that the Pueblo advisory failed to reach the right audience. According to an NSA official writing in 1992, the best lesson learned was that "we did not 'market' what we had at the right level. A skill that we now have in abundance just wasn't there in time, viz. making sure our assessment of what we are producing finds the right level.... I believe another mistake we made was in not sanitizing the 'warning message.' This would have given at least the senior officials a better sense of our concern."46 A sanitized message would have signalled the need to get the word-if not a formal warning-out to a broad audience.

What kind of warning did the EC-121 crew receive?

There is little evidence about how the EC-121 crew responded to warnings they received before and during their ill-starred flight, but evidence suggests they received warnings on the ground and in the air.

NSA concluded that the Air Force Security Service SIGINT site that played the major role during the shootdown performed well in issuing advisory warnings to the aircraft, trying to determine the EC-121's fate, and releasing a CRITIC stating the aircraft had probably been shot down. The evidence is insufficient, however, to prove that the EC-121 received the advisories or to ascertain the crew's actions upon receiving them.⁴⁷

Lt.Cdr. James H. Overstreet, the EC-121 mission commander, briefed members of his crew before the mission about three messages warning of increased North Korean vitriol. He discussed a message from the commander of US Forces Korea, warning of unusually vehement and vicious language used by the North in recent Military Armistice Commission meetings in Panmunjon. VQ-1 aircraft were told to be alert and to abort at first indications of any serious North Korean reactions. Overstreet and his crew were unaware, however, of an unusual MiG-21 deployment to Hoemun discussed below.⁴⁸

In their final few minutes, the EC-121 crew did not acknowledge the advisories that MiGs were rapidly closing on them. Unlike their USAF counterparts, Naval SIGINT aircraft did not carry communications gear that would automatically receipt for messages, so investigators could not determine if they had received them. (A naval board of inquiry subsequently recommended that the Navy install communications datalinks aboard its reconnaissance aircraft because they were faster and automatically acknowledged warnings.)

If it did receive the warnings, the EC-121 probably would have begun diving for the sea to gain speed and to drop below enemy radar coverage being used to vector the MiG against it. At a minimum, the aircraft would have turned away from the North Korean coast because the Seventh Fleet had directed that reconnaissance aircraft eliciting reactions should avoid provocative action and turn away from hostile territory.⁴⁹

Pyongyang Planned and Directed Both Attacks

The North's preparations for both attacks suggest that Intelligence Community (IC) analysts should not disregard the possibility of a deliberate, nationally ordered attack as they search for confusion in the chain of command, the fog of war, or unintentional escalation as the sole or primary causes of major incidents. National leaders may undertake malevolent courses of action no matter how irrational the behavior might seem. In both of these cases, the incidents unfolded in ways that suggest orchestration by the national command authority rather than spontaneous initiatives by local base commanders. Pyongyang had a history of tight control, which would discourage local military initiatives, and the preparations and coordination described in the new material suggests central direction.

The SIGINT record also points to that conclusion in the Pueblo case. The joint service operations required to conduct the seizure also would have required national direction, at least in the Korean context. In the case of the EC-121 shootdown, the staging of MiG-21s to a base close to the EC-121 track 18 days before the shootdown: the calm deliberation. timing, and precision characterizing the shootdown; and the lack of subsequent confusion in North Korean command and control likewise suggest prior planning and national oversight.50

How did DPRK prepare for the Pueblo *seizure?*

North Korean leaders probably began considering a plan to seize a US surveillance ship after the USS *Banner* briefly patrolled off the North Korean coast in 1967. A North Korean officer interrogating *Pueblo* crewmembers told them he was familiar with the *Banner* and that the DPRK had been waiting for the chance to seize it.⁵¹ North Korean communications at the time of the *Pueblo* seizure reveal confusion among NKN units when they reported the ship's hull number, probably because they were expecting to see *Banner*'s hull number, AGER-1 rather than *Pueblo*'s AGER-2.⁵²

The newly released material, however, does suggest that two North Korean fishing vessels that shadowed Pueblo for several hours-approaching within 100 yards—starting at midday on 22 January probably alerted the Korean military.⁵³ North Korean radar stations that afternoon began tracking a "target" operating in the same area as the USS Pueblo. An NKN radar station at Kalgoch' I-Ri (3919N 12734E) at 1500 local time-when the Pueblo still was under surveillance by the two fishing vessels-began tracking an unidentified ship of unknown nationality in the same general area Pueblo was operating in as it moved south. Kukchi-Bong radar station (3842N 12817E) began tracking the same ship by 1700 local.54

The NKAF also may have monitored *Pueblo* on the 22nd when, during the 1800 hour local, as many as six Second Fighter Division MiG-17s flew over the bay in which the unidentified vessel was steaming. Communications from NKAF pilots, however, did not refer to surface vessels, search activity, or other efforts, suggesting they were reconnoitering the unidentified vessel.⁵⁵

The DPRK continued to track the unidentified vessel through the night of 22/23 January.⁵⁶ NKN communications by 1000 on 23 January began referring to the target as an "enemy ship" and "target four," a term the NKN used as it was seizing *Pueblo*.⁵⁷

Not surprisingly, the new evidence suggests that the Ministry of National Defense (MND) participated in the seizure. NSA judged that the MND might have been involved in the tracking and seizure, given references in NKN voice communications to "the comrade...from the top," just prior to the seizure.58,59 At 1408 on the 23rd, submarine chaser SC-35 also received "orders from the top" to go farther in toward Wonsan before boarding Pueblo, then still in international waters.60 MND planning and overwatch probably would have been required given the attendant risks of seizing a US ship and the need to orchestrate a joint service operation.

NKAF activity before and during the incident also suggests a degree of interservice coordination that the MND would have mandated. By all previous accounts, NKAF MiGs participated in the seizure and, according to a recent history of the event, the lead pilot of a MiG flying on a pass near *Pueblo* launched a missile that struck the water several miles away from the ship.⁶¹

Although not corroborating a missile launch, the new material reveals that MiG-17s conducted exercises near the *Pueblo* between 1000–1100 on the 23rd.⁶² Once the ship was engaged, four pairs of MiG-17s operating from two air bases flew consecutive protective patrols and reported on the movements of NKN patrol boats and *Pueblo* between 1205 and 1410 local.^{63, 64} Discussing the fighter activity between noon and 1330, the CRITIC warning message commented that no hostile intent was noted from the fighters.

After the *Pueblo*'s seizure (and the EC-121 shootdown), the NKAF as-

sumed a primarily defensive posture, with no indications that Pyongyang was preparing to attack.⁶⁵ The NKAF deployed aircraft, including MiG 15/17 fighters, probably in anticipation of possible attack by Seventh Fleet units deployed in the Sea of Japan.⁶⁶

CIA analysts writing at the time also wrote that *Pueblo*'s seizure most likely reflected a decision "at the highest levels" of the North Korean government.⁶⁷ "The naval officers afloat and the controlling shore authority probably would not have made such a decision on their own, especially since the *Pueblo* had not actually violated North Korean territorial waters at the time and no onthe-spot decision was called for."⁶⁸

How did the NKAF shoot down the Navy EC-121?

NSA's newly released history reveals that a single NKAF MiG-21 Fishbed-F shot down the EC-121 about 80 miles off DPRK's extreme northern coast, and the joint US-AF-USN examination of the EC-121 wreckage concluded that the fighter fired an AA-2 Atoll air-to-air missile to down the aircraft. Although the shootdown itself was relatively simple, its timing and geometry suggest Pyongyang had carefully planned to exploit what it might have learned by monitoring other EC-121 missions off its coast.

Targeting a lumbering EC-121 also suggests prior planning because the NKAF probably would have found it easier to shoot down a propeller-driven EC-121 flying at 200 knots rather than one of the many jet-powered SIGINT aircraft routinely operating over the Sea of Japan. NKAF MiG-17s in fact had tried unsuccessfully to down a jet-powered RB-47 electronic intelligence (ELINT) aircraft some 80 miles off its coast in 1965.⁶⁹

The NKAF plan required repositioning high-performance fighters to a base closer to the anticipated EC-121 flight path and timing an attack run to coincide with the EC-121's closest approach to the base. The NKAF in an unusual move on 28 March deployed two Fishbeds-then their best fighter-to the Mig-15/17 training base at Hoemun. This base was the closest of all North Korean bases to the known flight path of the EC-121. Assessing the deployment, the SIGINT processing center in Okinawa on 30 March notified Far East military commands and SIGINT sites about this initial appearance of Fisbheds at Hoemun and suggested the move was related to pilot training, since a Mig-21 transition training unit was located at the east coast base from which the two fighters originated.70

The Fishbeds launched to intercept the EC-121 as it reached the extreme northern end of its orbit—the point at which it would reach its closest point of approach to Hoemun. Both MiG-21s launched from Hoemun around 1330 local. One Fishbed flew a defensive patrol and approached no closer than 65 miles from the EC-121. The second fighter raced to the EC-121, shot it down about 80 miles off the North Korean coast, and immediately returned to North Korean airspace. Simplicity itself.⁷¹

Closing Observations on Lessons

Both incidents suggest that it is unwise to count exclusively on defensive changes in an adversary's force posture as signals of hostile intent. The incidents also demonstrate that the few forces required to conduct a provocative act may not offer much of a warning signature. Pyongyang in neither instance ordered changes in its own alert status that would have cued intelligence analysts to an impending attack. Despite having planned (or at least approved) the operation on short notice, the North evidently did not change the state of alert near Wonsan or raise general NKAF readiness posture before attacking *Pueblo*.⁷² Similarly, a North Korean military alert did not precede the EC-121 shootdown.

NSA's declassification effort, in summary, fills in gaps about two controversial incidents and affords another opportunity to review lessons about conducting sensitive collection operations against hostile nations. The evidence warns us to apply greater rigor in risk-assessment and to avoid becoming slaves to tactical-pattern analysis. The *Pueblo* material also strongly demonstrates the need for clear warning language and the importance of not being overly cautious about crossing bureaucratic lines of responsibility—or "lanes in the road."

Most important, however, the evidence reminds us that even under the best of conditions we may receive little or no warning before our collection efforts are challenged by the conventional forces of nation states or far more opaque terrorist organizations.

* * *

Endnotes

- 1. National Security Agency (NSA), "The National Security Agency and the EC-121 Shootdown," 1989, accessed at www.nsa.gov as of 1 October 2014. (Hereafter "EC-121 Shootdown Report.") (All NSA reports cited in this article are posted on this website unless otherwise stated.)
- 2. Richard A. Mobley, Flashpoint North Korea: The Pueblo and EC-121 Crises (Naval Institute Press, 2003), 47.
- 3. Ibid., 33, 99.
- 4. Ibid., 11.
- 5. Ibid., 1-30.
- 6. Ibid., 74.
- 7. Ibid., 1–30.
- 8. Robert E. Newton, *The Capture of the USS Pueblo and Its Effect on SIGINT Operations*, Document 3997429 (NSA Center for Cryptologic History, 1992). (Hereafter *Pueblo History*.)
- 9. NSA Director Memorandum, "Statement re. Pueblo," 25 January 1968, Document 4092132.
- 10. NSA, "Statement re. Pueblo, Followup Questions and Answers," 25 January 1968, Document 4092132.
- 11. NSA Director's Talking Paper, 6 June 1968, Document 4092116.
- 12. Commander in Chief U.S. Pacific Fleet, "First Endorsement on Vice Admiral Harold C. Bowen, ltr of 9 April 1969," 2 May 1969, accessed in Declassified Document Reference System database on 18 October 2014.
- 13. Ibid.
- 14. Pueblo History.
- 15. NSA Memo from LCDR Koczak, 24 February 1969, Document 4092123.
- 16. Ibid.
- 17. NSA, "Statement re Pueblo, Followup Questions and Answers."
- 18. NSA, "Secondary Mission (SIGINT) and Mission Objectives of USS Pueblo," undated, Document 4121723.
- 19. Ibid.
- 20. Ibid.
- 21. LCDR Koczak (NSA) Memorandum, 24 February 1969, Document 4092123.
- 22. NSA, "Secondary Mission (SIGINT) and Mission Objectives of USS Pueblo."
- 23. Pueblo History.
- 24. Pueblo History; NSA background materials, "Pueblo Incident," undated, Document 4062752.
- 25. Commander in Chief U.S. Pacific Fleet, "First Endorsement on Vice Admiral Harold C. Bowen, ltr of 9 April 1969.
- 26. Pueblo History.
- 27. Ibid.
- 28. Ibid.
- 29. Ibid.
- 30. Ibid.
- NSA, "Report on the Assessment of Cryptographic Damage Resulting from the Loss of the USS Pueblo (AGER-2)," dated 28 July 1969, Document 4051684.
- 32. Jack Cheevers, Act of War (Penguin, 2013), 319.
- 33. Ibid., p. 320.
- NSA, "Report on the Assessment of Cryptographic Damage Resulting from the Loss of the USS Pueblo (AGER-2)", dated 28 July 199 (document 4051684).
- 35. Pueblo History.
- 36. Ibid.
- 37. EC-121 Shootdown History.
- 38. Pueblo History.
- 39. Pueblo History.
- 40. Ibid.
- 41. NSA memorandum to Dave Hatch, "Draft of Pueblo Papers," 14 April 1992, Document 4092105.
- 42. Cheevers, Act of War; 344.
- 43. Pueblo History, 27.
- 44. NSA memorandum to Dave Hatch, "Draft of Pueblo Papers."
- 45. Pueblo History.
- 46. NSA memorandum to Dave Hatch, "Draft of Pueblo Papers."
- 47. EC-121 Shootdown History.
- 48. Ibid.

Endnotes (cont.)

- 49. Ibid.
- 50. Ibid; Pueblo History.
- 51. Pueblo History.
- 52. DIRNSA 072040Z Feb 68, "North Korean Navy Voice Reflections of USS Pueblo Seizure," Document 3998160.
- 53. Pueblo History.
- 54. NSA 080345Z February 1968, "SIGINT Reflections of Unidentified Vessel Activity Off the North Korean East Coast on 22 January 1968," 8 February 1968, document 3981390.
- 55. NSA, "Actions Taken In Response to Pueblo Incident," undated, Document 4121729.
- 56. Ibid.
- 57. Pueblo History.
- 58. DIRNSA 261546Z Jan 68, "Additional SIGINT Reflections of the USS Pueblo Off the East Coast of Korea on 23 January," 26 January 1968, Document 3981388.
- 59. Pueblo History.
- 60. Pueblo History.
- 61. Cheevers, Act of War; 68.
- 62. Pueblo History.
- 63. DIRNSA 072040Z Feb 68, "North Korean Navy Voice Reflections of USS Pueblo Seizure."
- 64. Redacted originator, "North Korean Air Force Support During the Capture of the USS Pueblo," 25 January 1968, Document 4062789.
- 65. Redacted originator 230646Z January 1968, CRITIC Followup Nr One and Final, 23 January 1968.
- 66. EC-121 Shootdown History.
- 67. CIA, "The Pueblo Incident: Briefing Materials for Ambassador Ball's Committee," 5 February 1968, Document DOC_0000267787/0000267787_0001.gif on CIA Internet website www.foia.cia.gov.
- 68. Ibid.
- 69. EC-121 Shootdown History.
- 70. Ibid.
- 71. Ibid.
- 72. Memo from NSACC, "Pueblo Capture," 5 February 1968, Document 4052429.

