SIGINT reporting during the period surrounding the Gulf of Tonkin incidents in August 1964 represents the most significant contribution provided by traffic analytic efforts directed against North Vietnamese naval communications. SIGINT provided advance warning of both the 2 August attack on the USS MADDOX and the 4 August attack against the MADDOX and TURNER JOY, and afforded a clear picture of the results of these engagements. In addition, SIGINT reflections of the suppressive U.S. air strikes delivered after the 4 August incident helped the U.S. command to evaluate the results of those measures. Finally, SIGINT furnished concrete proof that the 2 August attack on the MADDOX was [redacted] preplanned.

4 Aug

This section will summarize the events of that period through a review of SIGINT publications and related correspondence.

During the night of 30 July, a covert marine operation resulted in the shelling of Hon Me, an island just off the coast of central North Vietnam. A report from USN27, San Miguel noted reactions to this operation:

> "On 31 July DRV naval communications reflected an "enemy" vessel firing on the island of Hon Me (19-21N 105-56E) and tenuous indications of another attack against an unidentified target in the Ben Thuy general area. Two, possibly four, DRV vessels reacted, however, the intruders apparently escaped unharmed." 1

The report noted that the four enemy vessels involved were the T142, T146, T377, and T379.

During this period, the USS MADDOX, on Desoto patrol, stayed well out to sea. The Desoto patrols, established for the dual purpose of asserting U.S. rights to patrol in international waters, and to provide a limited collection capability against targets not interceptable from shore sites, had been operating off the North Vietnamese and Chinese coasts since 1962. In accordance with normal procedure, a designated shore station- in this case, [redacted] was responsible for passing all relevant SIGINT reports to the MADDOX. In addition, provisions were made for any SIGINT producing unit to pass critical information directly to the MADDOX.

NSA25X1
NSA25X3

1 2/Q/VHN/R24-64 31 July 1964 DRV NAVAL COMMUNICATIONS REFLECT "ENEMY" INCURSION, 31 JULY 1964

Declassified and approved for release by NSA on 12-05-2005 pursuant to E.O. 12958, as amended

On 1 August, the MADDOX resumed her patrol, which took her past Hon Me Island. A report from USM 626J (now USM 808), Phu Bai noted that the MADDOX was being tracked by the North Vietnamese. Citing two messages passed from the T146 to the T142, each of which reported the position and course of an "enemy" vessel, the report commented that:

"Projected course and orbit of Desoto mission correlates with the above sightings." 2

Approximately 12 1/2 hours before the attack on the MADDOX, USN 27 issued a report at immediate precedence which furnished the first indications of the forthcoming attack:

"At 011627Z Ben Thuy sent a message to 255 (unidentified to type/class) noting that it had been "decided to fight the enemy tonight ... when you receive directing orders". ... The Desoto patrol is currently in the vicinity of Hon Me Island." 3

Just 30 minutes later, at 1954Z, the MADDOX reported that she had received notification of impending hostile action, and issued the following Sitrep:

DESOTO SITREP ONE

1. Have terminated orbit. Proceeding due east fm Pt CHARLIE at ten knots until daylight.

2. Heavy concentration of junks to north contemplate serious reaction my movements vic Pt CHARLIE in near future. Rcvd info indicating poss hostile action.

DESOTO SITREP TWO

1. Conditions unchanged.

2. If info received concerning hostile action is accurate, and have no reason to believe it is not, consider continuance of patrol present an unacceptable risk.

A subsequent exchange of messages between NSA and the MADDOX on 13 and 15 August confirmed the fact that the referenced warning was the USN 27 message cited above.

Approximately 2 1/2 hours later, at 2152Z, USN 27 issued a followup to its earlier report, which noted the continuing tracking of the MADDOX, and the reporting of this data to the T146. The T146 was also informed that three additional DRV vessels had been ordered into the area. 4

2 2/G11/VHN/R01-64 Spot report 011635Z 1 August 1964 PROBABLE DESOTO MISSION LOCATED BY DRV NAVAL ENTITY

3 2/Q/VHN/R26-64 011924Z 1August 1964 DRV NAVY MAY ATTACK DESOTO PATROL

4 FOLLOWUP NR 1 TO SPOT REPORT 2/Q/VHN/R26-64 012152Z 1 August 1964

At 0302Z, 2 August, NSA sent the following message to COMSEVENTHFLT, CINCPAC, and [redacted] (the station responsible for passing relevant information to the MADDOX): NSA25X1 NSA25X3

"USN-27 Spot Report 2/Q/VHN/R26-64/011924Z reports SIGINT suggestion that DRV Navy may intend attack on Desoto patrol. FYI, in relation to this possibility, DRV Naval communications of 30 and 31 July report an attack on Hon Me Island and indicate DRV intentions and preparations to repulse further such attacks. Due these reported attacks by vessels identified in DRV communications only as "enemy", and the indicated sensitivity on part of DRV as well as their indicated preparations to counter, possible the DRV reaction to Desoto patrol might be more severe than would be otherwise anticipated. USN-27 reports Desoto in vicinity of Hon Me as of approx 011924Z" 5

At 0414Z, less than four hours before the attack, USN-27 issued the second followup to its warning message, noting the absence of operational traffic on DRV communications, due to the activities of the MADDOX. 6

At 0429Z, NSA provided the MADDOX with the latest tactical callsigns and frequencies employed by DRV fast patrol boats, to enable the MADDOX to attempt to monitor the communications of the boats which threatened them. 7

At 0531Z, the MADDOX reported that at 0430Z, it had sighted three PT craft ten miles north of Hon Me, and that at 0515, fifteen minutes after arriving at Point DELTA, she had spotted two SWATOW class vessels north of Hon Me.

At approximately 0716Z, 55 minutes before the attack, USN-27 issued a critic message, referencing a DRV Naval message indicating that the T142 and T146 had been ordered to close with the MADDOX, and launch a torpedo attack. 8 Just sixteen minutes later, at 0732Z, NSA readdressed the message to all relevant recipients, including [redacted] NSA25X1 NSA25X3

At 0740Z, the MADDOX reported in a flash message that:

"I am being approached by high speed craft with apparent intention of torpedo attack. Intend open fire if necessary in self defense."

At 0807Z, the MADDOX reported that she was under attack:

"Being attacked by three DRV PT craft. I am open fire with 5 inch battery. Air support from TICO ETA 15 min."

"TICO" was the USS TICONDEROGA, flagship of the carrier task group to which the MADDOX was assigned.

5 B205/241-64 020302Z POSSIBLE PLANNED ATTACK BY DRV NAVY ON DESOTO PATROL

6 FOLLOWUP NR 2 TO SPOT REPORT 2/Q/VHN/R26-64 2/Q/VHN/R28-64 020414Z

7 B205/242-64 020429Z DESOTO TECH SUPPORT

8 o20716Z DESOTO CRITIC

At 0808Z, the TICONDEROGA reported that the MADDOX was under attack, and that four F8E aircraft had been dispatched to provide support, if necessary.

At 0829Z, the MADDOX reported that the attack was over:

"PT craft completed torpedo attack and retiring. Ship sustained no damage. Ships guns damaged one. Aircraft from TICO now attacking PT craft. I am retiring to the southeast."

At 0859, Commander, Seventh Fleet sent a message to the MADDOX, ordering her to:

"Retire from area until situation clears and further advised. Do not pursue attacking craft. Fire as necessary in self defense."

At 0947Z, NSA informed relevant field stations and processing centers of the attack on the patrol, quoting the three messages from the MADDOX. The message requested "extreme collection, processing, and reporting vigilance", and thanked [redacted] for passing NSA the three Desoto messages via telecon. [9] NSA25X1 NSA25X3

At 0949Z, the MADDOX issued a post-action report:**

"1. My position at 020915Z: 19-21.5N 106-46E. Retiring at best speed to rdvu with TURNER JOY thence TICO undir.

2. Present situation calm. Anticipate rdvu with TURNER JOY appro 021200Z. TICO aircraft providing continuous air support. ...

3. Action summary follows:

1. At 020750Z 3 torpedo boats ... were detected closing MADDOX at speed 50 knots.

2. MADDOX attempted to avoid...

3. At 0808Z when boats closed to 9000 yards MADDOX turned... and fired 3 warning shots with 5 inch batter.

4. Torpedo boats continued to close and were taken under continuous fire.

5. Although receiving numerous hits and near missed 2 boats close to about 5000 yards and because of volume of fire made an ineffective launch of two torpedoes. MADDOX turned away and torpedoes passed... Third boat had pulled almost abeam by 0812Z. He turned to close and at time of receiving direct hit dropped torpedo in water but it was not observed to run.

7. Machine gun fire from PT boats resulted in only one hit on MADDOX and no casualties.

8. After boats turned away MADDOX turned to pursue until relieved by TICO aircraft."

At 1008Z, the TICONDEROGA issued a wrapup of the attack on the MADDOX, summarizing the messages passed by the MADDOX when it realized the attack was imminent, and noting the dispatch of the four F8E aircraft:

"Word passed to watchdog F8's to attack the DRV patrol craft only if they attacked MADDOX. On arrival over MADDOX, MADDOX was opening fire with 5 inch batteries and directed aircraft to attack PT boats. ZNI ((ZUNI)) attacks made first. No direct hits observed. Strafing attacks made on all three boats. Pilots debriefed reported one PT boat damaged and dead in the water, two PT boats damaged and proceeding to beach. ... MADDOX reports no personnel or material casualties."

9 B205/243-64 020947Z DRV VESSELS ATTACK DESOTO PATROL IN GULF OF TONKIN

At 1124Z, NSA dispatched another message to the field, augmenting the information contained in the 0947Z message, and emphasizing the probability that the day's events would be reflected in communications:

"USS MADDOX reported at approx 020838Z that one DRV PT boat was dead in the water and burning and that other two PT boats were headed for the beach. Believe it likely that search and rescue operation will be conducted by DRV vessels thus increasing likelihood of reflections and further activity. Desoto arrived vicinity 19-47N 106-08E at approx 020300Z where it was to orbit for eight hours. Made deviation from track to avoid passing through large concentration of junks there but attack on Desoto (roughly five hours later) probably in vicinity of above coordinates. Burning PT boat presumably same general area." 10

At 1226Z, CINCPACFLT ordered the resumption of the Desoto patrol by the MADDOX and TURNER JOY, stating:

"In view MADDOX incident consider it in our interest that we assert right of freedom of the sea and resume Gulf of Tonkin patrol earliest."

A USN-27 report, issued at 1232Z, indicated that five vessels had gathered in the area prior to the attack- the T377, T379, T142, T146, and T135. The report noted that:

"an attack was imminent at 020512Z when unidentified shore station possibly Sam Son (19-43N 105-55E) ordered the T146 to "leave the T135 and turn back to the path of the enemy ... to attack." 11

At 1615Z, NSA announced to relevant field stations and processing centers that it was declaring an alert posture, SIGINT READINESS BRAVO "LANTERN", in view of the decision to resume the Desoto patrol with two destroyers. 12

At 2330Z, the MADDOX reported that she was resuming her patrol.

At 030745Z, the MADDOX reported that she had reached the vicinity of Hon Me Island without incident.

Approximately two hours later, USM-626J reported that DRV vessels were converging on Hon Me:

"DRV vessels first reported presence of two destroyers at 0837Z ... range 25 nautical miles...

Since that time, Haiphong has asked vessel T142 if it neededany category of ship (at Hon Me). At 0845Z, Vessel T333 reported T339 sunk, and that T333 and T336 were ((en route)).

Total number of DRV patrol vessels observed as of 0905Z is six (6): T135, T142, T146, T165, T333, and T336." 13

That evening, the MADDOX reported that the Desoto patrol was being shadowed by enemy craft.

10 B205/244-64 021124Z DRV NAVAL ATTACK ON DESOTO PATROL

11 2/Q/VHN/R29-64 FOLLOWUP NR 3 to SPOT REPORT 2/Q/VHN/R26-64

12 B205/245-64 021615Z SIGINT READINESS BRAVO LANTERN

13 2/G11/VHN/R07-64 030956Z SIGINT READINESS BRAVO "LANTERN" REPORT NR 2

At 1115Z on 4 August, USN-414T (now USN-27J), a small Marine detachment colocated with USM-626J at Phu Bai, and working with them, issued the following flash message:

"Poss DRV Naval operation planned against the Desoto patrol tonite 04 Aug. Amplifying data fols:"

Twentyfive minutes later, a flash message from USM-626J provided the amplifying data:

"Haiphong informed vessel T142 (SWATOW class) to make ready for military operations on the night of 04 August. The sister ship, T-146 has also received similar orders.

Message exchanges indicate that all efforts are being made to include MTB T333 in this operation, as soon as additional oil can be obtained for that vessel." 14

At 1240Z, the MADDOX noted that she had received the warning.**

At 1336Z, the TICONDEROGA reported that the MADDOX was tracking two unidentified surface craft and three unidentified aircraft. The TICONDEROGA again sent air support:

"2 F8's, 2 A4D's launched 041326Z to be followed by 4 AIH's fifteen minutes later."

At 1400Z, the TICONDEROGA passed word of a torpedo attack on the MADDOX:

"PT from west continued attacking run. MADDOX opened fire. PT boat launched torpedo- withdrawing. HQ PT's will be attacked by TICO acft augmented by CONSTELLATION acft."

At 1434Z, the TICONDEROGA relayed further evidence of hostile intent against the Desoto patrol:

"2 original skunks ((unidentified surface craft)) open to 40 miles. 3 new skunks contacted at 13 miles, closed to 11 miles at 40 knots, evaluated as hostile. CAP/STRIKE/PHOTO overhead and under control of Desoto."

At 1442Z, the MADDOX sent the following message to CINCPACFLT:

"Commenced firing on closing PT boat at 041140Z."

At 1459Z, she reported to CINCPACFLT: "Am under continuous torpedoes attack."

At 1515Z, the MADDOX informed CINCPACFLT of the results of the engagement to that point:

"Have thus far successfully avoided at least six torpedoes. Small craft continuing attacks. Believe one sunk by TURNER JOY. At least two remain. No air support at present. ADs inbound ETA 15 minutes. FRs inbound ETA 50 minutes. Am illuminating for aircraft."

At 1732Z, the TICONDEROGA reported that the engagement was apparently over, inasmuch as there had been no torpedoes launched in the last fifteen minutes, and no contacts were reported on the Desoto patrol's radar.

14 2/G11/VHN/R11-64 041140Z SIGINT READINESS BRAVO "LANTERN" REPORT NUMBER 7

IMMINENT PLANS OF DRV NAVAL ACTION POSSIBLY AGAINST DESOTO MISSION

At 2158Z, the MADDOX issued a summary of the engagement:

"At 041215Z rcvd info that DRV intended attack. My position 19-10.7N 107-09E. Proceed ... at thirty knots to buy time for air cover. Requested cover from ((TICONDEROGA)). At ((garbled)) detected three to five contacts 40-2 miles east ... These contacts appeared to attempt pursuit but broke off after about ten minutes at range 40 miles. Requested air support from ((TICONDEROGA)) at 041325Z. At 041408Z three contacts detcted. This contact held both ships... At 1419Z contacts changed to 155, 40 knots. First CAP overhead at 1410Z. At 1439Z Desoto units commenced fire on lead contact which had turned to intercept. Probable torpedo detected on sonar. ... until 1635Z Desoto units operated independently (garbled) evasion and firing at targets of opportunity. Action ceased at approx 1635Z with no further detections. Desoto units proceeded to vic 17-30N 1800E.

... Due to weather, limited visibility and lack of effective illumination, air support not successful in locating targets.

CO TURNER JOY claims sinking one craft and damage to another with gunfire. Damaged boat returned gunfire- no hits. CO TURNER JOY and other personnel observed bursts and black smoke from hits on this boat. This boat illuminated TURNER JOY and his return fire was observed and heard by TP personnel. MADDOX scored no known hits and never positively identified a boat as such."

During the night, CINCPAC ordered a series of air strikes, after receiving orders from JCS to do so. The first orders were issued while the engagement was still in progress:

At 1547Z, CINCPAC ordered CINCPACFLT to airlift 100 mines to the TICONDEROGA, for the possible mining of the five SWATOW bases in the DRV.

At 1554Z, CINCPACFLT received orders from CINCPAC, directing it to:

"Take steps to destroy all DRV PT boats and SWATOWs in the general area of the engagement in the Tonkin Gulf. Aircraft to cease pursuit at the three mile limit; ships at eleven miles."

At 1718Z, authority was granted to engage any DRV or CHICOM aircraft which showed signs of hostile intenttions.

At 2014Z, CINCPAC notified COMSEVENTHFLT to be prepared to strike at PT and SWATOW craft at Quang Khe, Ben Thuy, Hon Ne, Song Ma Estuary, Hon Bay, and Port Wallut. COMSEVENTHFLT was further ordered to be prepared to strike the Vinh oil storage complex.

Approximately twenty minutes later, CINCPACFLT was ordered to be prepared to execute air strikes against most of the same targets, beginning 2300Z. At 2227, CINCPACFLT received the order to execute the designated strikes.

Throughout 5 August, U.S. units in Asia were alerted for possible duty as a result of the Gulf of Tonkin incident and the retaliatory U.S. air strikes.

At 0735Z on 5 August, NSA issued an immediate message warning of possible further attacks by DRV vessels:

"DRV Naval communications continue to reflect activity of the vessels who were noted in the shadowing and the attack of the USS MADDOX and the USS TURNER JOY on 4 August. Apparently the activity noted in these communications is similar to activity which followed the 2 August attack on the USS MADDOX. While damaged vessels are being towed to port, preparations are presumably being made for another attack for 5 August."15

At 1219Z, CINCPACFLT summarized the naval action of 4 August:

"Analysis and final evaluation of number of PT involved attacks on MADDOX and TURNER JOY as well as number of torpedoes fired not complete. Two "P-4" class PT reported destroyed, one additional damaged."

Later in the day, NSA issued a summary of the events of 2-4 August:

"DRV Naval communications, following their unsuccessful attack on the USS MADDOX in the Gulf of Tonkin on 2 August, were largely concerned with (1) the recovery and disposition of two PT boats damaged by the MADDOX and aircraft launched by the USS TICONDEROGA and (2) tracking and shadowing of the MADDOX and USS TURNER JOY which by now had joined the MADDOX.

It is now apparent that the attack was carried out by Torpedo Flotilla 135, comprised of at least three PT boats, the T333, T336, and T339. The latter was sunk, while the T336 sustained heavy damages; the T333 apparently escaped with only minor damages. Following the action another PT boat, the T146 conducted an extensive search for the Flotilla, finally locating the T333 and T336 about 1900 hours local time on 3 August. A tugboat departed Haiphong on the 4th to tow the two damaged craft back to Haiphong. ...

After the 2 August attack, the MADDOX was ordered to resume patrol north and south of Hon Me Island (19-21N 105-56E) joined by the USS TURNER JOY, with air cover from the TICONDEROGA seaward to the destroyers to preclude any overflights of the mainland. During 3 August, DRV Naval communications reflected the tracking and shadowing of the two destroyers throughout the day; this activity was reported by both destroyers. They were also apparently shadowed by two presumably DRV aircraft. ...

On 4 August, DRV Naval communications again indicated preparations for another attack that night. The T142 and T146 were ordered to prepare for "military operations". The T333, which had apparently escaped unscathed after the first attack, was ordered to obtain oil to participate in the second attack. That night, the MADDOX reported both surface craft and aircraft appearing on its radar screen. They were later identified as hostile and reported closing in. The MADDOX reported at 1440Z that it was commencing fire on the closing PT boats. Subsequent reports from the destroyer indicated that two PT boats had been sunk. This was later confirmed by a DRV message. ...

Although initial messages indicated that the T142, T146, and T333 would be involved in the attack on the US destroyers on the night of 4 August, subsequent messages suggest that none of these were involved." 16 ?

At 052030Z, JCS issued a summary of the strike results:

"Vinh/Ben Thuy. Two strikes were flown from TICONDEROGA against POL storage area. First strike destroyed at least 8 POL tanks and set storage area ablaze. Second strike destroyed 2 to 4 more tanks. Six AA guns estimated destroyed.

15 P055/238 050735Z NORTH VIETNAM

16 3/0/VHN/R01-64 5 August 1964 SUMMARY OF SIGINT REFLECTIONS OF DRV ATTACK IN GULF OF TONKIN 2-4 AUGUST 1964

Quang Khe. One strike of 6 acft from TICONDEROGA were flown against torpedo boat concentrations. One boat estimated destroyed and 3 damaged. One ARFED coastal recce flight from TICONDEROGA attacked 3 PT boats inflicting light to moderate damage on all 3. Two additional PT boats struck as targets of opportunity were destroyed.

Hon Gay. Sixteen aircraft from CONSTELLATION participated in strike. Photos ... confirmed one SWATOW aground and burning inside harbor; second SWATOW burning but underway; one P-4 very slowly underway toward harbor; one P-4 underway full speed away from harbor. Subsequently 4 aircraft attacked all boats resulting in one SWATOW DIW ((dead in water)) burning, one PGM burning and slowly circling. Three PT boats were strafed and hit with rockets.

Loc Chao Estuary. Five PT boats observed en route to target by aircraft from CONSTELLATION. Two were taken under attack by A-1 aircraft. Both were left DIW smoking. 9 A-4 attacked remaining three PT type boats. One PT was hit and set afire, and one damaged in stern. ...

Air strike summary: Total sorties 64. Vinh POL estimate 90 percent damage. Estimate 12 of 14 large tanks destroyed.
30 PGM/PT sighted. 8 destroyed, 6 severely damaged, 10 moderately damaged, 4 lightly damaged. ...

In total, the sinking of four ships and the damaging of four others are all that can be established from North Vietnamese Naval communications during the period 2-5 August."

On 6 August, NSA issued the first of a series of Gulf of Tonkin Situation Reports, stating that this series would continue as long as the situation warranted. The first of these indicated that the North Vietnamese had scheduled yet another attack for the night of 5 August, but their plans had been abandoned in the wake of American air strikes. 17

Gulf of Tonkin Situation Report No 2, also released 6 August, summarized SIGINT reflections of the damage inflicted by the American strikes:

"One unidentified vessel in the Bem Thuy area reported 0800Z, 5 August as probably lost.

One unidentified, unlocated vessel reported 0823Z, 5 August as probably damaged.

T336 in Hon Ne area reported 0845Z, 5 August as disabled. (This craft was damaged during the first attack on the USS MADDOX on 2 August).

T125, SWATOW class PGM, unlocated, reported 1210Z, 5 August as damaged.

Five unidentified vessels, subordinate to a probable Flotilla 27 reported 1210Z, 5 August as damaged.

Vinh oil storage facilities reported bombed but extent of damages not reported." 18

On 6 August, NSA published a report summarizing a series of DRV Naval messages which showed conclusively that the attacks on the American destroyers were preplanned. The earliest indication was at 1627Z on 1 Au-

17 3/0/VHN/R02-64 SPOT REPORT 6 August 1964 GULF OF TONKIN SIGINT SITUATION REPORT NO 1 4-5 AUGUST 1964

18 3/0/VHN/R04-64 6 August 1964 GULF OF TONKIN SITUATION REPORT NO 2

gust, when a message was published reading, in part:

"The attack force has gone down. (We are) determined to fight the enemy tonight when there are orders to guide the attack."

On 2 August, at 0444Z came the most incontrovertible evidence of the planned attack:

"Have received order and the T146 and T142 have come down rising a fast speed and are to go parallel to the enemy and to launch torpedoes." 19

On 10 August, with the DRV Naval communications at a low level due to weather conditions, and a lessening of the crisis, the Gulf of Tonkin Situation Report sries was discontinued.

On 11 August, Mr Cyrus Vance, Deputy Secretary of Defense, sent the following letter to Lt General Gordon A. Blake, USAF, Director, National Security Agency:

"I have noted with graet pride and satisfaction the outstanding performance of US SIGINT units in connection with recent events in the Gulf of Tonkin. I wish, therefore, on behalf of the Secretary of Defense and myself, to express the deep appreciation of the Department of Defense for a job well done.

Please convey our gratitude and congratulations to the personnel of the National Security Agency and the Service Cryptologic Agencies for the vigilance and skill which they have once again demonstrated so clearly. In particular, I wish to commend the officers and men of the SIGINT units in Southeast Asia for their great contribution to the protection of U.S. lives, property and interests in that area."

19, 3/0/VHN/R03-64 6 August 1964 SUMMARY OF DRV NAVAL COMMUNICATIONS REVEALING PREPLANNED ATTACKS ON USS MADDOX