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COMBAT NARRATIVES

The Java Sea Campaign

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Washington, D. C.

March 13, 1943.

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Rear Admiral, U. S. N.,
Director of Naval Intelligence.

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COMBAT NARRATIVES

THE JAVA SEA CAMPAIGN

U. S. Confidential—British Secret

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OFFICE OF NAVAL INTELLIGENCE • UNITED STATES NAVY

1943

Foreword

January 8, 1943.

Combat Narratives have been prepared by the Publications Branch of the Office of Naval Intelligence for the information of the officers of the United States Navy.

The data on which these studies are based are those official documents which are suitable for a *confidential* publication. This material has been collated and presented in chronological order.

In perusing these narratives, the reader should bear in mind that while they recount in considerable detail the engagements in which our forces participated, certain underlying aspects of these operations must be kept in a secret category until after the end of the war.

It should be remembered also that the observations of men in battle are sometimes at variance. As a result, the reports of commanding officers may differ although they participated in the same action and shared a common purpose. In general, Combat Narratives represent a reasoned interpretation of these discrepancies. In those instances where views cannot be reconciled, extracts from the conflicting evidence are reprinted.

Thus, an effort has been made to provide accurate and, within the above-mentioned limitations, complete narratives with charts covering raids, combats, joint operations, and battles in which our Fleets have engaged in the current war. It is hoped that these narratives will afford a clear view of what has occurred, and form a basis for a broader understanding which will result in ever more successful operations.

E. J. King,

ADMIRAL, U. S. N.,

Commander in Chief, U. S. Fleet and Chief of Naval Operations.

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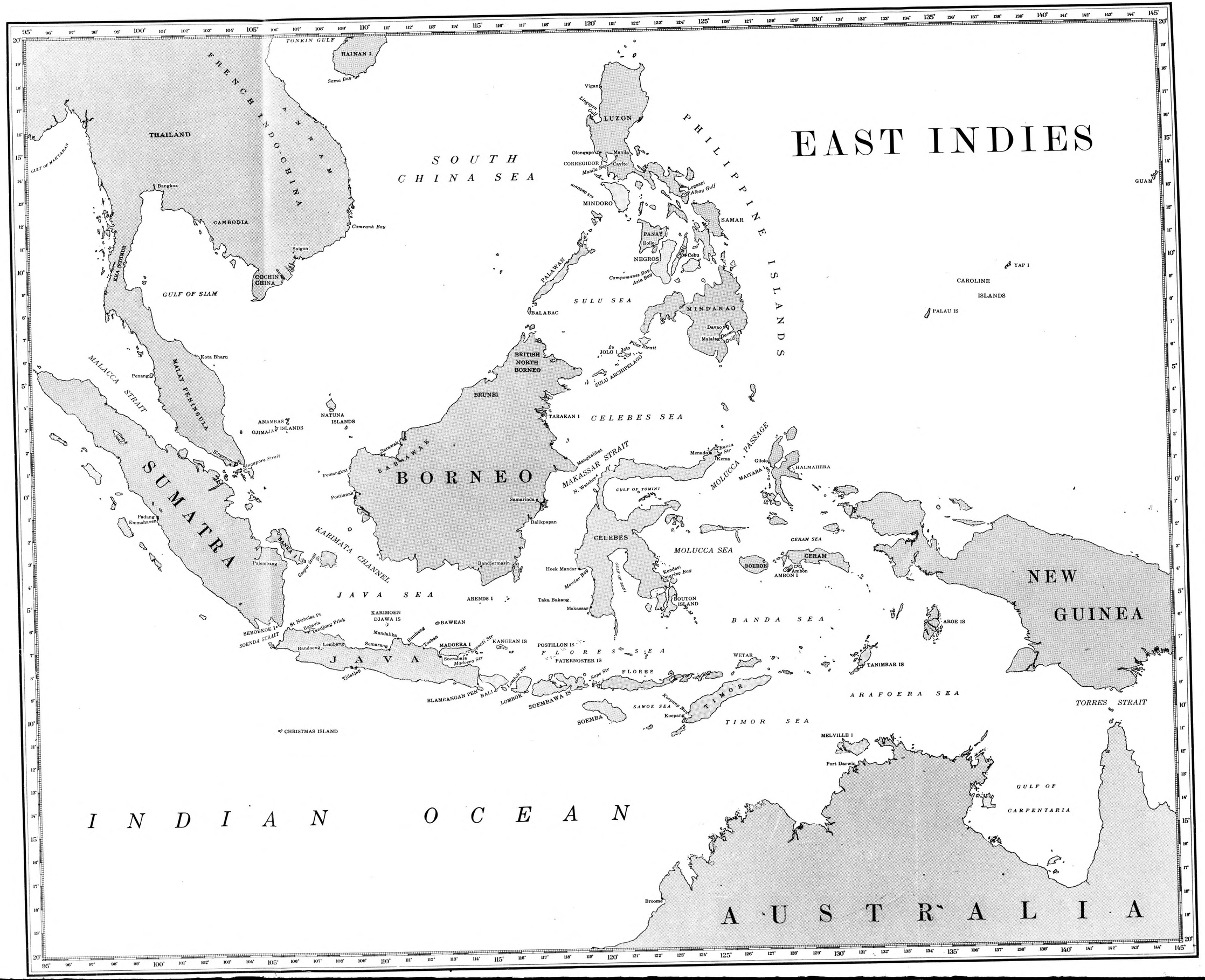
EAST INDIES
SOUTH CHINA SEA
PHILIPPINE ISLANDS
FRENCH INDO-CHINA
ANNAM
TONKIN GULF
HAINAN I.
Sama Bay
THAILAND
GULF OF MARTABAN
Bangkok
CAMBODIA
Camranh Bay
Saigon
COCHIN CHINA
GULF OF SIAM
KRA ISTHMUS
Kota Bharu
Penang
MALACCA STRAIT
MALAY PENINSULA
SUMATRA
Singapore
Singapore Strait
Padang
Emmahaven
Palembang
BANKA
Gaspar Strait
KARIMATA CHANNEL
ANAMBAS & OJIMAJA ISLANDS
NATUNA ISLANDS
Sarawak
SARAWAK
BORNEO
Pontianak
Pemangkat
Samarinda
Balikpapan
Bandjermasin
Mangkalihat
MAKASSAR STRAIT
N. Watchu
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CELEBES
Hoek Mandar
Mandar Bay
Taka Bakang
Makassar
GULF OF BONI
Kendari
Sigoring Bay
BOUTON ISLAND
CELEBES SEA
MOLUCCA SEA
MOLUCCA PASSAGE
Menado
Bangka Str
Kema
Gilolo
MAITARA
HALMAHERA
CERAM SEA
BOEROE
CERAM
EPO
Ambon
AMBON I
BANDA SEA
AROE IS
TANIMBAR IS
WETAR
ARAFOERA SEA
TORRES STRAIT
NEW GUINEA
GUAM
YAP I
CAROLINE ISLANDS
PALAU IS
Vigan
Lingayen Gulf
LUZON
Olongapo
Manila
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Manila Bay
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MINDORO
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Albay Gulf
SAMAR
PANAY
Iloilo
NEGROS
Cebu
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Asta Bay
PALAWAN
BALABAC
SULU SEA
MINDANAO
Davao
Malalag
Davao Gulf
JOLO I
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SULU ARCHIPELAGO
BRITISH NORTH BORNEO
BRUNEI
TARAKAN I
SOUTH CHINA SEA
INDIAN OCEAN
CHRISTMAS ISLAND
SOENDA STRAIT
St Nicholas Pt
Batavia
Tandjong Priok
Bandoeng
Lembang
JAVA
Tjilatjap
Sumarang
Mandalika
Rembang
Tuban
BAWEAN
MADOERA I
Soerabaja
Madoera Str
Sapeni Str
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POSTILLON IS
PATERNOSTER IS
FLORES SEA
JAVA SEA
ARENDS I
KARIMOEN DJAWA IS
SEBOEKOE I
BLAMBANGAN PEN
BALI
Lombok Str
LOMBOK
SOEMBAWA IS
Sape Str
FLORES
SOEMBA
SAWOE SEA
Koepang Bay
Koepang
TIMOR
TIMOR SEA
MELVILLE I
Port Darwin
GULF OF CARPENTARIA
Broome
AUSTRALIA

GUAM
Camranh Bay
Saigon
COCHIN CHINA
KRA ISTHMUS
GULF OF SIAM
MALACCA STRAIT
MALAY PENINSULA
Kota Bharu
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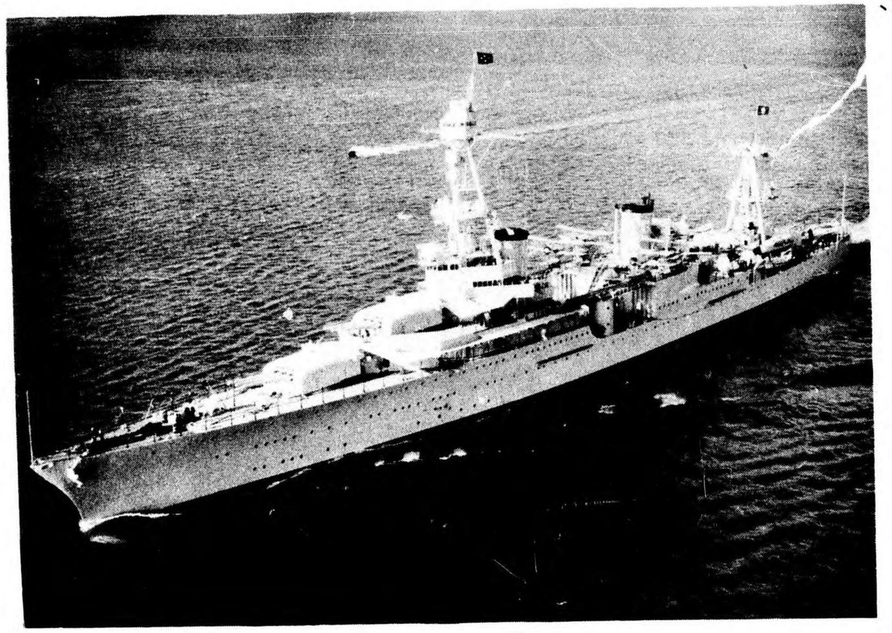
Broome
AUSTRALIA



The heavy cruiser *Houston,* flagship of the United States Asiatic Fleet.

The light cruiser *De Ruyter,* flagship of the Netherlands East Indies Fleet.

The Java Sea Campaign

The Java Sea Campaign is the story of the Japanese conquest of the Netherlands East Indies. Strictly speaking, the history of the United States Navy's participation in that campaign should begin with the arrival of our Asiatic Fleet in the Indies and the beginning of our active cooperation with the British and Dutch.

It is difficult, however, to set a definite date for such a beginning. Several of our ships were sent into the East Indies in the latter part of November 1941, and various units of our fleet followed at intervals all through December. Moreover, the conquest of the Indies by the Japanese was merely the culmination of a single, carefully planned campaign which opened with their attack on the Philippines and Malaya. Their advance into the Dutch possessions was carefully coordinated with and dependent upon their successes in these other theatres. While our defense of the Philippines is the subject of a separate narrative (in preparation), some reference must be made to events there to explain the situation at the opening of the Java Sea Campaign.

ORGANIZATION AND DISPOSITION OF OUR FLEET

The United States Asiatic Fleet was something less than its title suggested. Actually it amounted to only a modest task force. The flagship was the heavy cruiser *Houston,* commanded by Capt. Albert H. Rooks. There were two light cruisers, the *Boise,* commanded by Capt. Stephen B. Robinson till the latter part of January, when he was relieved by Capt. Edward J. Moran, and the *Marblehead,* under Capt. Arthur G. Robinson. To support these there were 13 overage, four-stack, flush-deck destroyers of the 1917–18 class, constituting Destroyer Squadron 29. These were:

Destroyer Squadron 29: Capt. Herbert V. Wiley
Paul Jones (FF), Lt. Comdr. John J. Hourihan
Destroyer Division 57: Comdr. Edwin M. Crouch
Whipple (F), Lt. Comdr. Eugene S. Karpe
Alden, Lt. Comdr. Lewis E. Coley
Edwards, J. D. (RFF), Comdr. Henry E. Eccles
Edsall, Lieut. Joshua J. Nix

Destroyer Division 58: Comdr. Thomas H. Binford
Stewart, Lt. Comdr. Harold P. Smith
Parrott, Lt. Comdr. Edward N. Parker (after January 29, Lieut. John N. Hughes)
Bulmer, Comdr. Leon J. Manees (after January 28, Lieut. David A. Harris)
Barker, Comdr. Louis G. McGlone

Destroyer Division 50: Comdr. Paul H. Talbot (after January 29, Lt. Comdr. Edward N. Parker)
Peary, Comdr. Harry H. Keith [1] (after December 10, Lt. Comdr. John M. Bermingham)
Pope, Lt. Comdr. Welford C. Blinn
Ford, Lt. Comdr. Jacob E. Cooper
Pillsbury, Lt. Comdr. Harold C. Pound

A tender, the *Black Hawk,* under Comdr. George L. Harriss, was attached to this squadron.

The submarines were to prove effective in the ensuing campaign. Their number had been gradually increased so that there were 29 at Manila by December. They were tended by the *Canopus* (Comdr. Earl L. Sackett), *Holland* (Capt. Joseph W. Gregory), and *Otus* (Comdr. Joel Newsom). This last had no shop facilities. A submarine rescue vessel, *Pigeon* (Lt. Comdr. Richard E. Hawes, and later Lt. Comdr. Frank A. Davis) was also attached to the group. The submarines were organized as follows:

Submarine Division 21:
Salmon (F), Lt. Comdr. Eugene B. McKinney
Seal, Lt. Comdr. Kenneth C. Hurd
Skipjack, Lt. Comdr. Charles L. Freeman
Sargo (FF), Lt. Comdr. Tyrrell D. Jacobs
Saury, Lt. Comdr. John L. Burnside
Spearfish, Lieut. Roland F. Pryce

Submarine Division 22:
Snapper (F), Lt. Comdr. Hamilton L. Stone
Stingray, Lt. Comdr. Raymond S. Lamb [2]
Sturgeon, Lt. Comdr. William L. Wright
Sculpin, Lt. Comdr. Lucius H. Chappell
Sailfish, Lt. Comdr. Morton C. Mumma, Jr.[3]
Swordfish, Lt. Comdr. Chester C. Smith

[1] Commander Keith was wounded at the bombing of Cavite on December 10.
[2] Relieved December 28, 1941 by Lt. Comdr. Raymond J. Moore.
[3] Relieved in December 1941 by Lt. Comdr. Richard G. Voge.

Submarine Division 201:
S-36 (F), Lt. Comdr. John R. McKnight, Jr.[4]
S-37, Lieut. James C. Dempsey
S-38, Lieut. Wreford G. Chapple [5]
S-39, Lieut James W. Coe
S-40, Lieut. Nicholas Lucker, Jr.
S-41, Lt. Comdr. George M. Holley

Submarine Division 202:
Seadragon (F), Lt. Comdr. William E. Ferrall
Sealion, Lt. Comdr. Richard G. Voge [6]
Searaven, Lt. Comdr. Theodore C. Aylward
Seawolf, Lt. Comdr. Frederick B. Warder

Submarine Division 203:
Perch (F), Lt. Comdr. David A. Hurt
Pickerel (RFF), Lt Comdr. Barton E. Bacon, Jr.
Porpoise, Lt. Comdr. Joseph A. Callaghan [7]
Pike, Lt. Comdr. William A. New
Shark, Lt. Comdr. Louis Shane, Jr.
Tarpon, Lt. Comdr. Lewis Wallace
Permit, Lt. Comdr. Adrian M. Hurst [8]

Of great importance was Capt. Frank D. Wagner's Patrol Wing TEN, which had 30 PBY's. There were in addition a few smaller observation and some utility planes. Our aircraft were tended by the *Langley* (Capt. Felix B. Stump, relieved by Comdr. Robert P. McConnell), the *Childs* (Comdr. John L. Pratt), the *Preston* (Lt. Comdr. Max C. Stormes), and the *Heron* (Lt. Comdr. William L. Kabler).

There were the gunboats *Tulsa* (Lt. Comdr. Tillet S. Daniel) and the *Asheville.* Capt. Kenneth M. Hoeffel was relieved of the command of the latter by Lt. Comdr. Jacob W. Britt in December, in order that he might take command of the Inshore Patrol. The river gunboats *Luzon* (Lt. Comdr. George M. Brooke), and *Oahu* (Lt. Comdr. Douglas E. Smith) had been brought back from China. The *Mindanao* (Comdr.

[4] Transferred to command of *Porpoise,* February 6, 1942, after loss of *S-36* aground.
[5] Transferred to command of *Permit* February 13, 1942. Relieved on *S-38* by Lieut. Henry G. Munson.
[6] Transferred to command of *Sailfish* in December 1941, after destruction of *Sealion* at Cavite, December 10.
[7] Relieved Feb. 6, 1942 by Lt. Comdr. John R. McKnight, Jr.
[8] Relieved Feb. 13, 1942 by Lieut. Wreford G. Chapple.

Alan R. McCracken) left Hongkong early in December, arriving in Manila on the 9th. The *Wake* had been stripped and left at Shanghai, ready for demolition, but it was captured by the Japanese soon after war broke out. The *Isabel* (Lieut. John W. Payne, Jr.) was a former yacht converted into a 20-knot gunboat.

Finally there were the usual auxiliaries: the oilers *Pecos* (Comdr. Elmer P. Abernethy) and *Trinity* (Comdr. William Hibbs); several mine sweepers of the bird class, *Bittern* (Lieut. Thomas G. Warfield), *Finch* (Lt. Comdr. Thurlow W. Davison), *Lark* (Lt. Comdr. Hugh P. Thomason), *Quail* (Lt. Comdr. John H. Morrill), *Tanager* (Lt. Comdr. Egbert A. Roth), *Whippoorwill* (Lt. Comdr. Charles A. Ferriter); and a tug, *Napa* (Lieut. Nathaniel M. Dial).

Six PT boats, comprising MTB Squadron THREE under the command of Lieut. John D. Bulkeley, arrived in the latter part of September. These were to have a spectacular and well publicized history.

Commander in Chief of our Asiatic Fleet was Admiral Thomas C. Hart. Admiral Hart also directly commanded the Coastal Frontier, leaving to Rear Admiral Francis W. Rockwell, Commandant of the Sixteenth Naval District, only the immediate defense zone off Manila and Subic Bay. Admiral Hart further took over personal command of the submarines, Patrol Wing TEN, and the PT boats. These responsibilities required a large staff, which was headed by Rear Admiral William R. Purnell.

Our submarine divisions had been grouped in two squadrons, but with the arrival of additional submarines in November Admiral Hart discontinued the squadron organization. Thereafter the divisions were directly under the Commander of Submarines. On December 10th Capt. John Wilkes was appointed to that position because of his ability and previous experience.

When in November it became evident that Rear Admiral William A. Glassford, Commander of the Yangtze Patrol, would be available, Admiral Hart decided to employ his great experience as commander of the task force. Upon his arrival in Manila about December 1st, Admiral Glassford set about forming his staff, and with the outbreak of war left at once for the *Houston*.

During the first days of December our ships were disposed as follows: The *Houston*, after hurriedly mounting additional machine guns, was ordered to Iloilo to await the commander of the task force. The *Boise*

arrived at Manila on December 4th, escorting an Army convoy. She refueled at once and sailed for Cebu to await further orders.

The *Marblehead* with four destroyers had been dispatched to Tarakan (Borneo) on November 24th with instructions to delay in that area. At the same time the *Black Hawk* and four destroyers had been sent to Balikpapan with similar instructions. When on December 6th news came of the Japanese expedition headed for Malaya, these destroyers were ordered to Singapore. They had just arrived there and were fueling when news of the sinking of the *Prince of Wales* and *Repulse* was received on December 10th. They immediately hurried north to search for survivors. It was expected that Japanese planes would be on the watch for rescue vessels, and when it was learned that British destroyers had picked up all surviving personnel our ships were ordered to clear the area before dawn. These four destroyers were withdrawn from Singapore before the middle of the month.

Of our remaining destroyers, the *Peary* and the *Pillsbury* were in early December still at the navy yard undergoing repairs necessitated by a collision in October. Three more were on patrol in the Manila-Subic Bay area.

As for our aircraft, a squadron of PBY's was based on Sangley Point, and the others of the large planes were at Olongapo and Los Banos. A detachment of patrol planes operated from Davao Gulf (near Malalag), where the *Preston* was stationed, while some planes were at Balabac attended by the *Heron*. The seaplane tender *Langley* was at Manila, as were the oilers *Trinity* and *Pecos*, which had recently arrived from the Netherlands East Indies with cargoes of fuel.

The three submarine tenders, *Canopus, Holland,* and *Otus* were in the Mariveles-Manila area. Those submarines not at sea were well dispersed.

At 0300 on December 8th news of Pearl Harbor was received. At dawn came the first attack on the Philippines, when Japanese planes destroyed two PBY's on the water at Davao Gulf. A little later four enemy destroyers entered the gulf. The *Preston* at Malalag let them pass and then slipped out behind them. It was not till noon that the Army landing fields in northern Luzon were bombed and many of our planes destroyed.

Admiral Glassford immediately left by plane for the *Houston* at Iloilo. The *Boise* joined from Cebu. The *Langley, Trinity,* and *Pecos* with two destroyers slipped from Manila Bay under cover of darkness to join

them and the little fleet headed for the Dutch oil ports via Makassar Strait. In crossing the Sulu Sea our ships sighted the tops of two vessels silhouetted against the evening glow, bearing about 255° T. It was thought that they were a Japanese light cruiser and destroyer, although identification was not certain. Apparently they did not sight our vessels, which were on the dark side of the horizon, and our cruisers, having the tenders to protect, did not develop the contact.

It had been planned in case of war to station the S-type submarines in defense of the northern Philippines. Eight large submarines were to be placed on enemy lines of communication. Eight more were retained as a reserve striking force, while the rest were held as relief for the patrols.

This plan was put into effect at once, except that the idea of a reserve striking force was quickly abandoned and the additional submarines were assigned stations, chiefly in defense of the Philippines. In addition to those in defensive positions, *Pike* was stationed at Hainan Strait, *Pickerel* off Camranh Bay (Indo-China), *Sturgeon* off the Pescadores (near Formosa), *Sargo* off Cochin China, *Spearfish* off French Indo-China, and *Swordfish* off Sama Bay (south coast of Hainan). These submarines stationed off enemy ports had very little success, probably because most enemy forces had already departed before they arrived.

WITHDRAWAL FROM THE PHILIPPINES

On the early afternoon of December 10th Japanese bombers destroyed the navy yard at Cavite. More than 50 two-engine bombers came over in two waves and dropped their bombs from above the range of the nine 3-inch antiaircraft guns which were supposed to protect the station. There was no fighter opposition and the bombing was leisurely and accurate. Practically the entire establishment was destroyed. Among the ships the most serious loss was the large submarine *Sealion,* which was destroyed in dock by two direct hits. *Seadragon* escaped serious damage, thanks to the excellent work of *Pigeon* in pulling her away from the fire which enveloped *Sealion.* The *Peary,* which was completing repairs, received a hit on the foremast, but escaped with only minor damage and a few casualties.

This episode made it painfully evident that the enemy had complete control of the air over Manila and that we could no longer base our ships there. Our submarines did continue for a while to operate from Manila, but only with the greatest difficulty. They were in port as little as

possible and had to submerge during the day. The *Canopus* remained to service them. She was placed in shallow water and covered with a camouflage net, but was hit several times.

Since it was clear that it was only a matter of time before the submarines would have to abandon Manila, Capt. Doyle, just relieved as Commander of Submarines, was sent south with the *Otus* and *Holland* to set up an alternate command in the south. They sailed on the evening of the 10th, accompanied by the gunboat *Isabel* and two destroyers. They were followed by a second group consisting of the *Tulsa,* the *Asheville* and two mine sweepers, *Lark* and *Whippoorwill.* All arrived safely in Borneo without having encountered any enemy ships. Admiral Hart later regretted that he did not send other small ships south at this time while they could still be taken out.

This movement of naval vessels to the south was followed by an exodus of merchant shipping. About 40 deep sea ships had sought refuge in Manila Harbor in addition to several smaller inter-island boats. During the bombing of Cavite on the 10th one medium size vessel had been hit and sunk. The following day Admiral Hart called a conference of owners and agents, at which he expressed the opinion that the small ships were as safe underway as in harbor. He advised that although the fleet could provide no escort, the larger ships had a fairly good chance of escape to the south. Practically all did depart safely during the next few days with cargoes of considerable aggregate value. As Admiral Hart remarked, "We were lucky."

The destruction of the Army's fighter power made it too dangerous to continue to base the PBY's in the Philippines. This was made obvious on the 12th, when our PBY's were followed in by enemy fighters which attacked after our planes had landed. Seven PBY's were burned on the water. An enemy raid on Subic Bay on the 13th destroyed further patrol planes, leaving fewer than one full squadron. Admiral Hart on the 14th directed the remainder of Patrol Wing TEN to move to the Netherlands East Indies. The three tenders sailed south with such personnel and spare parts as they could carry. There were left in Manila only damaged planes, of which four were eventually repaired. This loss of air reconnaissance was a severe handicap to our submarines in their attempt to intercept enemy landing forces.

The Japanese landed about December 10th at Aparri on the north and at Vigan on the northwest coast of Luzon and on the 12th at Legaspi in

the south. The Army expected the enemy to attempt his main landing at Lingayen Gulf, and some of our submarines were stationed accordingly. But when the enemy came, on the 21st, so skillfully did he bring in his transports that out of at least eighty we sank only one.

Meanwhile the advance of Japanese forces in both north and south was accompanied by a rush of events which meant the end of our naval operations in the Philippines. On the 19th Sangley Point was heavily bombed, most of the aviation gas was destroyed and the radio was put out. On the 23d Admiral Hart learned that General MacArthur contemplated an early withdrawal to Bataan and Corregidor. The following day he learned that such a move was already underway and that Manila was to be declared an open city. This meant that the *Canopus* had to be moved, that submarine spare parts and Diesel oil had to be taken from Manila, and the remaining oil stores destroyed. Provisions had to be moved to Corregidor and Mariveles. It meant, in fact, that it would very shortly be impossible to operate our submarines from Manila. On the 24th and 25th bombs falling around the office building of the Commander of Submarines damaged equipment and supplies. On the 29th the Japs found the *Canopus* in her new location, and a stray bomb killed six men on board.

Admiral Hart had determined to remain on Luzon so long as the submarines were operating from Manila. Now that most of his fleet was already in the south and it was evident that the submarines would very soon have to follow, he decided to go directly to the Netherlands East Indies, rather than move into Corregidor as Admiral Rockwell had done on the 21st. One plane was sent south with staff officers on the evening of the 24th. At the last minute half the seats were given up to high Army officers. Admiral Hart had planned to leave the evening of the 25th, but during the day the Japanese found and destroyed the planes which were to take him. Consequently he left on the submarine *Shark* on the 26th. The two remaining destroyers, *Pillsbury* and *Peary,* were sent south the next day, after the Japanese had made a determined attempt to destroy them in the harbor. One of them, the *Peary,* had an eventful passage.

Manila Bay was bombed daily without opposition. Our submarines while at the base had to lie on the bottom during daylight, so that the crew had no opportunity for rest or recreation. Submarines at sea were therefore ordered to go south to the Malay Barrier when forced to leave

their stations. On December 31st the last of our submarines left Manila Bay, taking the submarine staff and as much material as possible. It was too late to get out *Canopus* and *Pigeon.* On January 2d the Japanese entered Manila unopposed.

Admiral Rockwell remained at Corregidor where a unified command was set up under General MacArthur. There was left at Corregidor and Mariveles the gunboats *Mindanao, Luzon* and *Oahu,* the mine sweepers *Tanager, Finch* and *Quail,* and a few tugs and ex-yachts for patrol. There were, too, the six PT boats of MTB Squadron THREE. Three Philippine Q-Boats were operated by the Army but serviced and maintained by the Navy.

ADVENTURE OF THE *PEARY*

The *Peary* had a narrow escape during the Japanese bombing of Manila Bay on the 26th. A few near hits caused slight damage, but by skillful maneuvering she escaped being hit by any of the 45 bombs which the enemy dropped at her. After this experience Admiral Rockwell gave permission for her to proceed south to join our task force.

Sailing the night of the 26th the *Peary* arrived at Campomanes Bay (Negros) the following morning. Since Japanese planes could be expected in this area, she was tied up along shore and camouflaged with green paint and palm branches. This work was completed just in time, for shortly afterwards 5 enemy bombers passed over, headed north. Apparently they did not see our destroyer, but as a precaution she was moved to Asia Bay and again camouflaged. Again Japanese planes passed over, southbound this time, again without detecting the *Peary.*

With evening the *Peary* sailed for Pilas Strait at 25 knots and did not reduce her speed until she found herself in the Celebes Sea next morning. At 0810 an enemy patrol bomber was sighted and appeared to be making a bombing approach. The *Peary* maneuvered and the bomber moved into the sun without dropping any bombs. From that position it shadowed our ship for the rest of the day.

The *Peary* had previous intelligence of an enemy submarine and cruiser off northern Borneo, and fearing that the plane had reported her position she increased her speed to 25 knots and set her course for Menado on the northeast tip of Celebes. At the same time she radioed a report that she was being followed by an enemy plane, but could get no response.

Early in the afternoon two PBY's passed over but did not reply to the Andusrec[9] challenge. In fact, it was their misapprehension of the situation which was responsible for the *Peary's* subsequent difficulties.

At 1420 three more Japanese patrol bombers appeared and began an attack which lasted about 2 hours. The planes attacked individually, each dropping two 500-pound bombs on each run. The *Peary* maneuvered violently and successfully, firing all her machine guns whenever the planes came within range. All except the fourth bomber had made two attacks when a torpedo plane was sighted low on the port bow. At about 500 yards it dropped two torpedoes. The *Peary's* starboard engine was reversed, the ship swung sharply around, and the torpedoes passed ahead of her. A few seconds later a second torpedo plane came in on the port quarter and also dropped two torpedoes. With right full rudder the stern swung around and out of their path as they passed along the *Peary's* starboard side only about 10 yards from the ship.

The fourth bomber approached from the stern, attempting to make a bombing attack to coincide with that of the torpedo plane. The *Peary,* which was almost at a standstill, rang for emergency full speed ahead; the engines responded well and the bombs fell harmlessly 100 yards astern.

In pulling out from their attacks, the torpedo planes attempted to strafe the *Peary,* but our own machine gunners effectively discouraged this maneuver and the planes turned away without doing any damage except a few holes in the stacks.

As evening was now approaching it seemed unlikely that the Japanese would make any further attacks before dark and it was decided not to go into Menado for shelter but to pass on through Banca Strait into Molucca Passage. In passing Menado at 1743 the signal searchlight was used to ask if the strait was mined, but no reply could be obtained. The strait was safely passed and the *Peary* was off Kema when three Lockheed Hudson planes with British markings approached from the stern. As the first passed ahead the Andusrec challenge was made on the destroyer's signal searchlight and it was thought that the pilot waved in answer, but the remaining two planes came on for a glide bombing attack. The *Peary* opened fire and swung hard to starboard, so that the first bomb fell wide on the port beam. As the ship heeled over in her turn one of

[9] Allied recognition signal.

the machine gunners fell overboard and was last seen swimming in his life jacket toward a nearby island.

Each plane made two attacks, dropping a 250-pound shrapnel bomb on each run. The *Peary* succeeded in avoiding all except the last, which was a close miss. It hit 10 yards off the port propeller guard and shrapnel from it entered the steering engine room, breaking steam pipes and shearing the main steering ropes. Other fragments killed a man at a machine gun on the fire control platform and set fire to a 4-inch cartridge. G. A. Fryman, Fireman Third Class, seized it and threw it overboard before it exploded.

As the planes pulled out of their glide they strafed the ship but without doing any damage.

It was soon discovered that the starboard engine's Kingsbury thrust had been damaged and was overheating. The prolonged maneuvering at high speed had reduced fuel to a dangerously low level and there was a shortage of feed water. Consequently it was decided to put in at Maitara Island (near Ternate), where the *Peary* arrived in the early morning. She was tied up along the reef and again covered with palm branches. Supplies were obtained and the thrust repaired, so that she was able to get underway for Ambon on the evening of the 30th. The repairs proved inadequate, so that she proceeded on the port engine alone and arrived at noon the next day.

At Ambon it was discovered that the PBY's which had seen the *Peary* crossing the Celebes Sea had reported a small Japanese cruiser proceeding at high speed toward Menado escorted by a Japanese bomber. The Australians were apologetic for their bombing. At least there was the comfort that our allies had shown better marksmanship than the Japanese.

The *Heron,* which was sent north to assist the *Peary,* was herself bombed in a protracted action in Molucca Strait on the 31st. Shrapnel from near hits penetrated the ship's side and started fires in the paint locker and forward hold. About the middle of the afternoon a 100-pound shrapnel bomb struck the foremast near the top and sprayed the ship with splinters which did considerable damage. The *Heron* acquitted herself well, however, in spite of her 12-knot speed, and succeeded in shooting down a large enemy seaplane.

ESTABLISHMENT IN THE NETHERLANDS EAST INDIES

Thus by the end of December our Navy had been compelled to abandon the Philippines. The few small craft which remained there

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assisted in the defense of Bataan. The *Canopus* continued to do excellent work in spite of bombings in which she was hit; one of the gunboats assisted in blasting out a dangerous enemy force which landed behind our Army's lines; and the PT Boats rendered extremely valuable service in spite of constantly increasing difficulties of fuel and repairs. Our submarines continued some patrols in Philippine waters but there could no longer be any major naval activity in the north.

The Army's stubborn defense of Bataan, while it occupied a considerable number of the enemy for several months, could not, of course, prevent the Japanese from establishing bases in the Philippines for further conquest. Even before the end of December the Japanese were preparing bases at Davao (on Mindanao) and at Jolo (in the Sulu Archipelago) for their next attacks. On December 27th Patrol Wing TEN sent six PBY's north to attack shipping at Jolo, but Japanese fighters intercepted them and shot down four. Fortunately many of our men were saved. The yellow tide was rolling on, with only an eddy about Bataan, which still stood against it. Already our submarines were being forced to operate farther to the south in their attacks on enemy communications. But they were doing better. On January 7th *Seawolf* came into Soerabaja after having sunk four Japanese ships off Hainan, thus equaling the record of the most successful Dutch submarines.

Meanwhile our Navy was reorganizing in the south. The Navy and War Departments, correctly judging that the Malay Barrier might not remain secure, chose Port Darwin in Australia for development as a major base and our auxiliaries were sent there. Darwin's existing facilities were poor, its situation in some respects disadvantageous and exposed, and it was too far away for effective operations north of the Soenda chain. Therefore our operational command was set up at Soerabaja. The command post of our task force was already established in space supplied by the Dutch. Admiral Glassford remained in the *Houston* in command of the task force and Admiral Purnell, Chief of Staff, exercised a *de facto* fleet command. When Admiral Hart arrived on January 1st he added his establishment. Facilities were good except for radio, and our fleet personnel did well in remedying this deficiency by rigging up apparatus from parts obtained from a variety of sources.

The Dutch Naval Command was in Batavia and Vice Admiral Conrad E. L. Helfrich urged Admiral Hart to join him there. However, with our prospective main base at Port Darwin and with a large pro-

portion of our ships engaged in convoying army ships through Torres Strait our "center of gravity" was in the east, and Soerabaja was better suited to our needs. Meanwhile it was learned that the British Far Eastern Command had left Singapore. While Admiral Layton and most of his staff were at Colombo awaiting reinforcements, a secondary command post was to be established in Batavia.

All these arrangements were overshadowed, however, by the question of a unified command. On January 10th Gen. Sir Archibald P. Wavell, R. A., arrived to take over the Supreme Command, for which he chose the title of ABDACOM. His staff organization was as follows:

Intendant General (and Deputy ABDACOM): Lt. Gen. George H. Brett, U. S. A.
Chief of Staff: Maj. Gen. Sir Henry R. Pownall, R. A.[10]
Intelligence: Col. Leonard F. Field, R. A.
Navy Operational Command: Admiral Thomas C. Hart, U. S. N. (ABDAFLOAT).
Chief of Staff:[11] Rear Admiral Arthur F. E. Palliser, R. N.
Air Operational Command: Air Chief Marshal Sir Richard E. C. Peirse, R. A. F.[12] (ABDAIR).
Army Operational Command: Lt. Gen. Hein ter Poorten, N. E. I. A. (ABDARM).
Chief of Staff: Maj. Gen. Sir Ian S. Playfair, R. A.[13]

The next week or so was spent in organization of the new command. Consequently Admirarl Hart was engaged in Batavia most of the time after January 9th and could visit the American operational base at Soerabaja only briefly. General Wavell formally took over his command on January 15th and 3 days later established his headquarters at a mountain resort hotel at Lembang, 10 miles north of Bandoeng. The site was chosen because it permitted dispersal and (it was hoped) offered some security from air attack. Its remoteness from the sea was some handicap for the naval command, but Admiral Hart agreed to join it in the interest of unity. Communications were far from adequate and remained so in spite of hard work for their improvement. To keep contact with American operations at Soerabaja Admiral Hart established at

[10] Formerly Commander in Chief in Malaya.
[11] This position was first offered to Capt. van Staveren, Admiral Helfrich's Chief of Staff, but he could not be spared for it.
[12] Air Marshal Peirse was in England, so that General Brett was in charge of air pending his arrival.
[13] Formerly Chief of Staff to General Pownall in Malaya.

Lembang an American radio and coding unit, which proved of tremendous value.

The machinery of a unified command was thus established, but the obstacles to its smooth working were tremendous. Admiral Hart indicated the nature of the difficulties: "ABDACOM had a very complicated command, involving four Army, four Navy and six Air organizations. Consequently there was a great deal to do in organizing and equipping a GHQ, which naturally required time. In the face of an advancing enemy there was, of course, not time. The command function had to be exercised; but we never reached a condition under which it could be so exercised that there would be certainty that information and clear directives would be transmitted with despatch." There was, too, the difference in language, always a handicap, even in such small ways as the inability of our officers to read Dutch charts and sailing instructions, which were superior to ours for Netherlands East Indies waters. Finally, beyond the major common interest, there were differences in national attitudes which made it difficult to frame our ultimate strategy. For instance, when the time came it was the natural and courageous determination of the Dutch to make a desperate, last ditch stand in Java. The British view was that it was more important to preserve our forces intact for a moment when they might be used to greater advantage. How could such views be reconciled?

The actual solution was that in fact each nation retained control of its own forces. Admiral Palliser was consulted when it was a question of using British ships, and Admiral Helfrich whenever Dutch forces were concerned. The sincere desire—and desperate necessity—for cooperation made this system work, but it was not a unified command in the strict sense.

The attention of the Supreme Command was focused on Malaya and Burma, where things were going badly. General Wavell was for some time absent from Lembang to visit Singapore and a second time to visit Rangoon. The British naval interest was chiefly in convoying troops to Singapore, in which the Dutch assisted. This work was necessary, but this employment of cruisers and destroyers of course prevented the creation of a striking force which might break up Japanese amphibious expeditions advancing from other directions. The Dutch were interested in convoying their own merchant shipping, but at the same time worked for the formation of a striking force.

The news that the Japanese, operating from Davao and Jolo, had taken Tarakan (Borneo) and Menado (Celebes) on January 11th served as a reminder that while one prong of the Japanese advance was threatening Singapore there was another equally dangerous to the east.

Japanese tactics were becoming clear. They depended heavily upon air power. After building up their force at some base, their planes proceeded to overcome Allied air opposition (when there was any) at the next point of attack. Sometimes this was done by seaplanes, sometimes by carrier planes, or, if the distance was not too great, by land-based planes. Then they sent down heavily loaded transports, keeping to shallow water and screening them heavily against submarines, and landed men and even heavy equipment without wharves. Generally the distance was too short to permit our naval forces to attack them en route. As soon as they were in control of the new area, they repaired the air field and set about gathering force for the next advance.

These tactics were well adapted to the nature of the Dutch East Indies. The absence of interior communications in most of the islands—outside Java and Sumatra there are only about 50 miles of railroad in the whole group, and very few roads—meant that it was necessary to seize only a few coastal points and to control the sea and air in their vicinity. Since the Japanese maintained the initiative it was simple for them to build up a local sea and air superiority for each move.

In one sense, air power was decisive. It was the Japanese air force which had virtually driven us from Manila 2 weeks before their ground force entered the city and which later made Soerabaja and Port Darwin untenable in the same manner. It was their air force which dogged our ships on passage and on occasion pounded our striking force before it could approach its objective. Our only really successful surface engagements were fought at night or when for some reason Japanese planes could not be present. Their planes gave them excellent intelligence of our movements and often denied us information of theirs. Admiral Hart was keenly aware of this and worked hard for closer cooperation of our air and naval forces, but it was never possible to plan an operation with air support.

To oppose Japanese air power we had some Army bombers based on Java, and a few fighters, in addition to the British and Dutch planes. Our greatest weakness was in fighters, of which we never had enough adequately to protect our bases. Our Navy relied heavily on Captain

Wagner's Patrol Wing TEN. This group, flying their highly vulnerable PBY's, did magnificent work, but they led a hunted existence, dodging into clouds to escape Jap fighters while on mission, moving from place to place to escape destruction on the water at home. Only the mobility of our tenders made their continued operation possible.

ENGAGEMENT OFF BALIKPAPAN,[14] JANUARY 23-4

Both arms of the Japanese pincer were closing a little tighter. In the west the British were beginning to talk of their army's retreating all the way to Singapore. In the east the Japanese completed their occupation of Tarakan, while the ships which had landed their force at Menado were reported gathering at Kema. This latter activity seemed to point to a movement to Kendari (southeast Celebes) and Ambon in the near future. Thus by the middle of January it was evident that the Japanese were preparing for another move down either Makassar Strait or Molucca Strait or both.

Our submarines were stationed accordingly. Two Dutch submarines were ordered to patrol the western side of Makassar Strait between 1° and 2° south (i. e., off Balikpapan) and Admiral Hart directed that three American submarines be placed in the strait also.

Meanwhile Admiral Hart planned to attack the enemy force gathering at Kema. It was to be a night torpedo attack by destroyers supported by the *Marblehead*. Three submarines were stationed to cover the return of our ships. The attack was to take place on the night of the 17th and was to be in conjunction with an attack by Army planes operating from Kendari. Our ships had already made the greater part of the difficult run toward Kema when *Pike* and *Permit*, which had been sent in for reconnaissance, reported that no enemy forces of importance were present, and the attack was cancelled. A few days later (on the 21st) *Seawolf* saw a convoy assembling off Kema but could not attack. Not long afterwards this force came down and took Kendari.

It was next planned to make an attack in Makassar Strait, already patrolled by our submarines. One of these, the *S-36*, went aground on January 19th at Taka Bakang. It proved impossible to get her off and she had to be abandoned. On the 20th there was a Dutch army report of a large convoy heading southward toward the important oil port of

[14] Also called the Makassar Strait action.

Balikpapan. That night *Porpoise* and *Pickerel* were stationed in Makassar Strait between North Watcher and Mangkalihat, with *Sturgeon* to back them up, while *Spearfish, Saury,* and *S-40* were placed off Balikpapan.

On January 22d *Porpoise* and *Pickerel* reported the enemy force moving. *Sturgeon* to the south had just uncoded the message when she made sound contact with a multiple screw ship which she thought was either a cruiser or a carrier. She sent two torpedoes into this vessel, but had no opportunity to observe results. This event she celebrated by the triumphant message, "*Sturgeon* no longer virgin." Her maidenhood was well lost. There had been considerable air activity in the area on the previous day and there was none the following day, so that our surface vessels were able to make their attack and withdrawal without sighting an enemy plane. This unusual circumstance indicates that the *Sturgeon* probably damaged or sank a carrier. Apart from this, our submarines had no success in breaking up the enemy expedition.

It was planned to make a surface attack on this enemy force similar to that planned in the abortive attempt on Kema. *Houston* was on important convoy duty and was not available, so that it was planned to conduct our raid with four destroyers, the *John D. Ford, Pope, Parrott,* and *Paul Jones*, supported by the *Boise* and *Marblehead*. This force was commanded by Admiral Glassford, with Comdr. Paul H. Talbot in command of the destroyers.

The destroyers fueled from the *Marblehead* in Koepang Bay, Timor, and started north. On the way through Sape Strait (between Soembawa and Komodo Islands) the *Boise* struck an uncharted pinnacle rock. A long gash was torn in her bottom near the keel, so that she had to return at slow speed to port on the south coast of Java. There it was found that she would have to go to India for repairs and so she did not participate further in the campaign. Admiral Glassford transferred his flag to the *Marblehead*, but difficulty with a turbine reduced her speed to 15 knots. Therefore the destroyers were ordered on ahead to make the attack, while the cruiser trailed along to provide air reconnaissance and to cover their withdrawal.

Patrol Wing TEN had maintained contact with the enemy force and reported 9 transports, 4 cruisers and 14 destroyers moving toward Balikpapan in small groups. The PBY's conducted this reconnaissance without meeting any air opposition, due probably to *Sturgeon's* success a day

or two earlier. On the afternoon of the 23d Dutch bombers attacked the convoy and claimed hits on 2 cruisers, 4 transports, and a destroyer.

Our four destroyers were just south of the Postillon Islands, about midway between Soembawa and southwest Celebes, when on the morning of the 23d they received orders from CINCAF to move northward for the attack. They proceeded at 22 to 25 knots in order to arrive off Hoek Mandar by nightfall. There were heavy north swells running in the lower part of Makassar Strait and our destroyers took on several, which broke bridge windows and buckled spray shields.

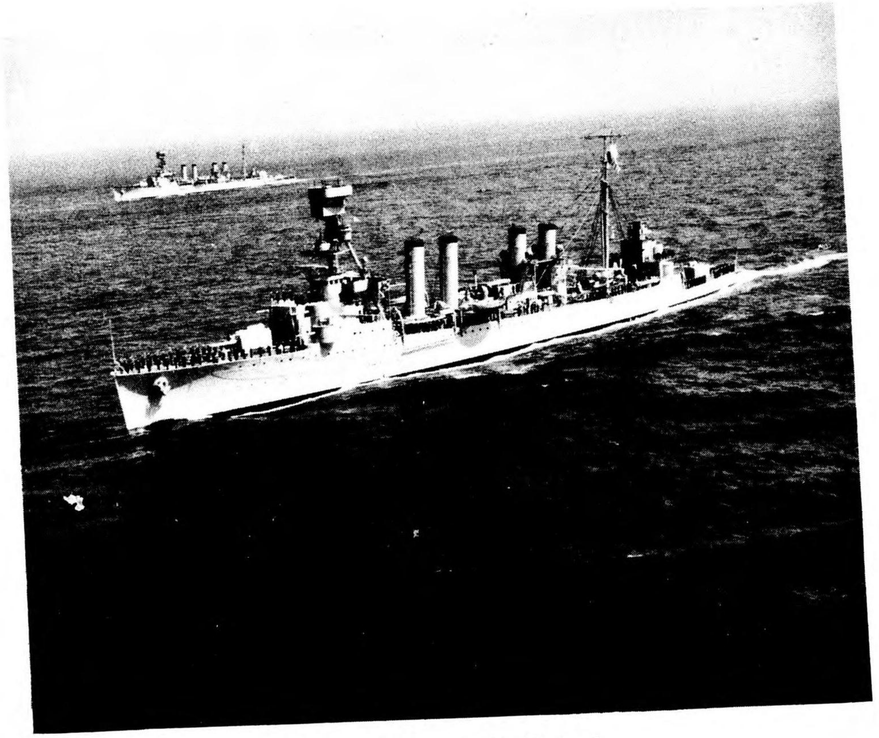
During the afternoon Comdr. Talbot issued his orders for the action: "Primary weapon torpedoes. Primary objective transports. Cruisers as necessary to accomplish mission. Endeavor launch torpedoes at close range before being discovered . . . Set torpedoes each tube for normal spread. Be prepared to fire single shots if size of target warrants . . . Will try to avoid action en route . . . Use own discretion in attacking independently when targets located. When torps are fired close with all guns. Use initiative and determination."

Course was set directly for Mandar Bay in order to deceive the enemy reconnaissance planes which were expected, but the only patrol plane sighted proved to be one of our own. An hour after sunset our little force changed course to the northwest and, passing Cape Mandar abeam to starboard, struck out across Makassar Strait toward Borneo. Speed was increased to 27 knots, just about the maximum that their old engines could maintain. There was concern on board *Pope* whether she could hold that speed, but she did.

A little after 2200 Java time, as our ships were approaching the Little Paternoster group, what appeared to be a searchlight beam was seen on the horizon ahead and course was changed to avoid a possible enemy contact. A little later, course was set directly for Balikpapan with the expectation of arriving about 0300.

At 2357 as our ships approached Balikpapan a light was seen far ahead. At first it appeared to be a searchlight but a little later was seen to be a fire, now flaring up, now subsiding. It was evidently in the water some distance from shore, but sometime afterward a second fire was seen at Balikpapan itself. Apparently the Dutch bombers had done a good afternoon's work. Perhaps because of the fires a light haze hung over the water and visibility, which had been good, decreased. The seas had moderated considerably during the run up the strait.

Docks and oil refineries, Balikpapan, Borneo.



The light cruiser *Marblehead*.

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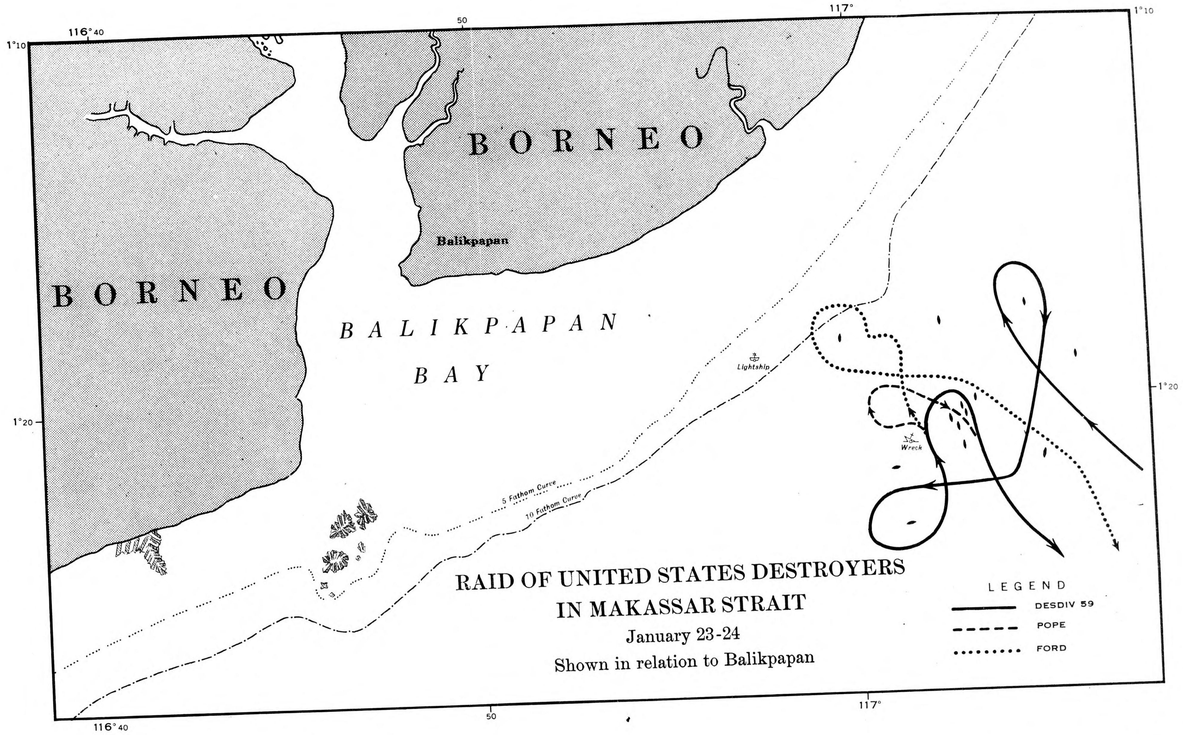
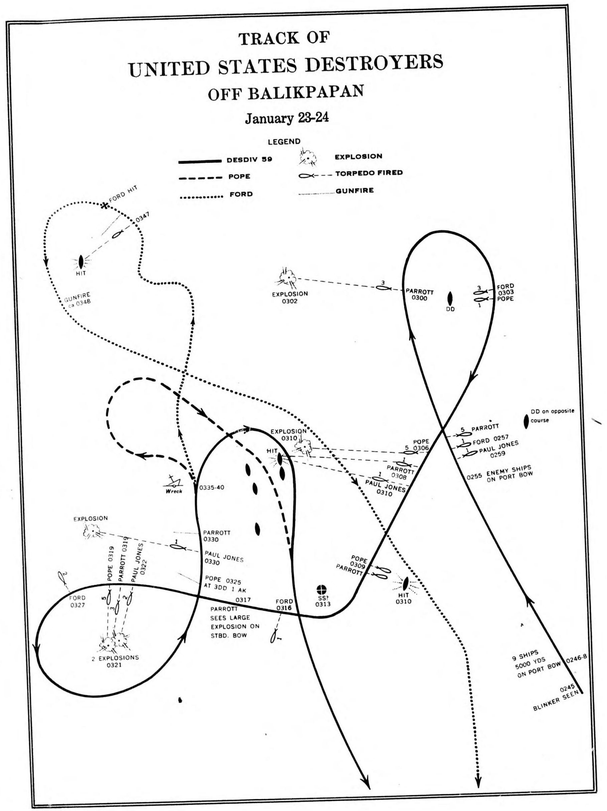
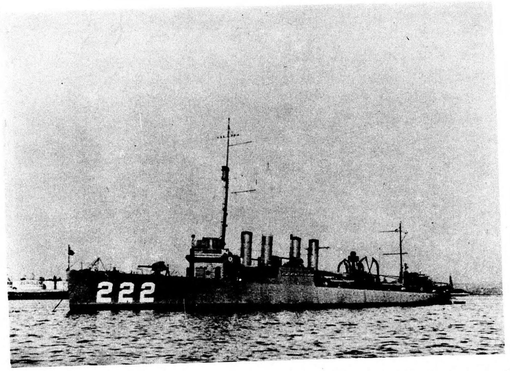
The light cruiser *Marblehead*.







The destroyer *Bulmer*. All destroyers of the United States Asiatic Fleet were of this type.

Amboina Island.

Course was set to make certain of arriving at Balikpapan north of the pilot ship and well clear of the mine field. Our ships were now drawing close. The first contact with the enemy came at 0245 when a column of several enemy destroyers appeared ahead, crossing our course from starboard to port. They challenged by blue blinker tube, but our ships only turned a little to starboard to avoid closer contact. The lookout on the *Ford* thought he saw the Japanese destroyers turn and follow to investigate.

As our ships thus sailed through the enemy's patrol they were in column, moving at high speed. The *John D. Ford,* with Comdr. Talbot aboard, was in the lead, followed by *Pope, Parrott,* and *Paul Jones,* in that order. They were in constant communication by voice radio, with transmitters set up on the bridge of each destroyer, except for the *Paul Jones,* on which the transmitter failed.

It is difficult to form an entirely accurate picture of the events of the following hour, during which our little column steamed back and forth among the enemy vessels, firing first their torpedoes and then their guns at dim outlines of ships, spreading havoc and confusion among the Japanese. Two or three minutes after passing the enemy's destroyer screen several ships were sighted on the port bow, dimly silhouetted against the glow from the fire at Balikpapan. Someone on the *Ford* counted nine ships 5,000–6,000 yards distant. It seems likely that this was one of the larger groups scattered along the shore and it was probably in this group that we sank several when our destroyers turned back south.

A minute or two after sighting these vessels, the *Ford,* still leading the column northward, met an enemy destroyer on opposite course which passed close to starboard. The *Ford* fired a torpedo, but it missed astern. *Pope* could not bring her tubes to bear in time, and *Parrott,* warned by voice radio to "get him," fired five torpedoes (fired by percussion at the tubes; it was intended to fire only three) as the ship passed 500 to 1,000 yards to starboard. But the trainers had not been able to swing the tubes rapidly enough and all five passed astern of the target. This broadside left *Parrott* with only one torpedo in her starboard battery. The *Paul Jones* bringing up the rear fired one torpedo, but it too apparently missed.

At 0300 *Parrott* sighted a group of three ships 4,000 to 6,000 yards to port and fired three torpedoes at the largest. This time her aim was good, for a few minutes later there was a tremendous explosion in the midst of the group and flames shot up 500 feet into the air.

Meanwhile Comdr. Talbot in *Ford* decided that our ships had pretty well run through the enemy and started a turn to the right to run back through. *Ford* had already swung around to a course of 090° when she heard the explosion of *Parrott's* hit, off her starboard beam as she was then heading.

At 0307, now heading back southward for another run through the enemy, *Ford* sighted a large ship to starboard and fired three torpedoes, apparently without success. At about the same time, or perhaps a little before, *Pope* coming along behind *Ford* fired a torpedo at an enemy destroyer (possibly the same ship) which she passed abeam to starboard, but it missed.

As our column steamed back south *Pope* saw several heavy ships about 4,000 yards to starboard blinking lights, seemingly as a result of the explosion caused by *Parrott's* hit a few minutes before. (This group may have been the one first sighted, outlined by the light on shore.) *Pope* fired her five remaining starboard torpedoes at the group and in about 4 minutes was rewarded by two large explosions in the area of the target. Meanwhile, very shortly after *Pope* fired her five torpedoes, *Parrott* behind her fired her one remaining starboard torpedo at a destroyer 2,000–3,000 yards to starboard—possibly one of the group at which *Pope* had fired. Two minutes later there was a great explosion on the destroyer, a column of flame leapt toward the sky and when it died down there was only wreckage where the destroyer had been. At about the same time *Paul Jones,* coming up behind, had fired a torpedo at a ship on her starboard bow. There were two quick explosions on the ship which broke up and sank immediately. As the *Parrott* at the same moment claimed a hit (by voice radio) it seems likely that she and the *Paul Jones* fired at the same target. It is impossible to say whether this too was the same explosion that *Pope* observed or whether each destroyer scored a hit.

Perhaps it was a minute later that *Pope* (at 0309 according to her log) fired a torpedo at a destroyer to port, but could see no explosion. In another minute *Parrott* reported that she had hit the destroyer *Pope* had fired at, and the explosion was seen. It is not clear whether this destroyer was the same as that described in the preceding paragraph, or whether it was a separate success. The times were about the same, but the first was to starboard while this was said to be to port.

At 0312 *Pope* reported a submarine to starboard sending recognition signals, and a moment later *Parrott* sighted what seemed to be a submarine on the surface.

From this point on there is a greater discrepancy in the times noted in the logs of our destroyers and it is even more difficult to know what happened. The column next swung westward. (*Ford* puts it at 0320, but the others put it somewhat earlier.) Soon after turning, *Ford* fired a torpedo to port. *Pope* not long after turning also fired her remaining torpedoes at a destroyer which passed on her port beam (possibly the same ship at which *Ford* had fired). *Parrott,* coming along behind *Pope,* heard *Pope* report that she had fired torpedoes at the enemy destroyer and that it had fired some at her. *Parrott* then fired her three remaining port torpedoes at the destroyer, believing that *Pope* had missed. There was an explosion near the stern of the destroyer and a high column of smoke rose (*Pope* reported two explosions). It is not clear whether *Pope* or *Parrott* deserves credit for this hit. At the same moment both ships saw torpedo wakes and both felt jars as if they had been hit by torpedoes which did not explode. Possibly they had struck logs or floating wreckage.

While this was taking place *Paul Jones* in the rear of our column at 0322 observed a transport on her port beam on a course to cross astern of her. *Paul Jones* fired one torpedo, and, as the transport turned sharply to the left (perhaps to avoid it), followed with a second which caught her on the starboard bow. "This ship was later observed sinking with stern high out of the water."

By this time *Pope* and *Parrott* had exhausted their torpedoes and were directed to use gunfire if further targets appeared. This began what might be called the second phase of the action. Having run through the enemy group, our ships made a loop to the left and turned north through it again. Back on a northerly course *Pope* at 0325 opened fire with her guns on two destroyers, then a transport, then another destroyer. As she passed at high speed her gunners could not remain long on any one target, and the flash of the guns blinded the lookouts, but she thought she got three hits on a cargo vessel and probable hits on the destroyers. Five minutes later *Parrott* fired starshells to illuminate a ship (believed to be a destroyer) 2,500 yards to port. Seven rounds of 4-inch shells were fired

at the enemy ship before it was lost from sight. Possibly there was one hit. At the same time *Paul Jones* fired a torpedo at a ship challenging on her port beam and believed she scored a hit.

Shortly afterwards *Ford* passed the smoking hulk of a merchant ship standing on end with lifeboats nearby. As our column swung by this wreck *Ford* slowed and stopped, believing she was approaching the edge of the mine field. *Pope* behind her swerved sharply to avoid ramming her, and *Parrott,* coming up at full speed, put her rudder hard right to avoid colliding with the hulk. As she turned she saw gun flashes ahead. *Ford* and *Pope* were in a melee with enemy destroyers. Our column split and our ships lost contact with each other. *Pope, Parrott,* and *Paul Jones* all made turns to the right and began to withdraw to the south. *Ford* continued to run up to the northwest close to the shore.

Shortly after losing the rest of the column *Ford* sighted a destroyer 2,500 yards to port. Seeing this destroyer fire torpedoes, she backed her port engine full to avoid them. Then resuming her course she fired a torpedo at a large merchantman to port and followed with gunfire. The blast of the resulting explosion could be felt on board the *Ford,* and the merchantman was seen to list about 45° to port. At about the same time (0347) *Ford* herself was hit by a shell, our only casualty of the entire action. It did only slight damage, however. It was of small caliber (about 3-inch) and hit the port side of the after deck house, where the torpedo workshop was located. The small fire which it started was quickly controlled.

Changing course to the right for a moment, *Ford* passed under the bow of a merchant ship, then swinging left she passed close by another which seemed to be on fire. She opened fire on this with her main battery and obtained several hits, and in addition strafed it with her machine guns as she passed. She then completed her turn to the left, steadied out on a course of 120° and began her retirement.

As our ships withdrew *Pope* opened fire at about 0350 on a destroyer. *Parrott,* seeing shells falling around her, told her that she was probably firing on her sister ship, and action ceased before any damage had been done. Aside from this the withdrawal was uneventful. *Parrott* and *Pope* joined around 0350, and *Paul Jones* came up about 0400. *Ford* found the others about daybreak.

At 0700, being well clear of the enemy area, speed was reduced to 23 knots in order to insure that fuel would last to make port. Shortly

afterwards our destroyers sighted a plane from the *Marblehead* which signaled that the cruiser was 50 miles to the south. Some time later the *Marblehead* was sighted. The destroyers formed a screen around her and the little force moved southward.

Our destroyers had performed the almost incredible feat of steaming back and forth through a considerably superior enemy force for over an hour. Surprise had, of course, been the major element in our success. Our plan of using torpedoes first probably prevented the Japanese from realizing what had happened for at least half an hour. Evidently they at first thought that they had got into a mine field or that a submarine was among them. It was a particularly fortunate circumstance that a column of their own destroyers was under way on patrol at the time. That may explain why our own destroyers excited no more suspicion than they did at first or why the Japanese hesitated to fire on them. The Japanese fear of firing on their own vessels was evident, while due to our column formation we were under no such restraint until near the end of the action when our ships became separated.

It seems fairly certain that we sank at least 5 or 6 ships. Two of these, because of the nature of the explosion and of their burning, were thought to have been fuel ships. One was a destroyer, which was completely demolished, and at least 2 merchantmen were sunk. It is entirely possible that there were other hits unrecorded due to the poor visibility, and there seems no doubt that several ships were further damaged by gunfire. The commander of a Dutch submarine, which was present through the action and next morning, reported that our forces had destroyed 13 enemy ships, but there is some doubt as to the accuracy of his count.

Our men were disappointed in the results of their torpedo fire. The suddenness with which targets presented themselves, the high speed of our ships, the close ranges and shallow water probably explain the small percentage of hits. It is comforting that the Japs did worse, for they undoubtedly fired several torpedoes at our ships.

The whole action took place within an area of only 4 or 5 miles radius, with its center about 4 or 5 miles northeast of Balikpapan lightship.

Our own submarines and two Dutch which were in the vicinity had been warned to keep clear of our surface attack. One Dutch submarine was, however, actually on the spot and left only when, as the commanding officer put it, "I saw that my friends were doing very well." The following morning this submarine torpedoed a Japanese cruiser from such close

range that the explosion damaged the submarine. It had to lie on the bottom till dark, when it proceeded on the surface to its base.

On the forenoon of January 25th United States Army bombers raided the enemy ships left at Balikpapan and sank two transports anchored there. Twelve Japanese pursuit planes (the first seen since the action) attempted to intercept our planes. Five of the Japanese aircraft were shot down.

DARK INTERLUDE

The Japanese expedition in Makassar Strait had been heavily hit, and Army B-17's gave it some additional touches on January 28th and again on February 2d, when they sank two transports. Our action had not prevented the Japanese from taking Balikpapan, but they were stalled there for some time.

East of Celebes, however, the Japanese continued to progress. On the 21st they began a series of bombing attacks on points in northeastern New Guinea and in the Bismarck Archipelago. They followed these by landing at Kavieng in New Ireland and at Rabaul in New Britain, where the RAAF bombed their ships three times within a week. About the same time they landed at Kieta on Bougainville Island in the Solomons.

In Borneo they advanced overland from Sarawak, which they had controlled since early January, to new points on the western coast. On January 29th they took Pemangkat. Within a few days they controlled Pontianak and soon they were pushing beyond. At the same time planes operating from Samarinda and Balikpapan began to bomb Bandjermasin on the southeast coast. These movements threatened to bring them opposite Java and southeastern Sumatra.

Had we been able to strike at other expeditions as effectively as in Makassar Strait the Japanese advance might have been slowed sufficiently to permit help to arrive from the United States. But we could not strike again immediately. The *Marblehead* required repairs to her turbine. Our destroyers were beginning to show the effects of having been almost constantly at sea since the beginning of the war. Moreover, many of their torpedo tubes were empty and no more torpedoes were to be had at once. Our larger submarines had been running patrols of 50 days and our smaller ones 30 or 40 days, and often when they were returning to port for a badly needed rest a new emergency required their turning again to sea.

The Dutch ships were in better condition, but, acting on information which later proved inaccurate, Admiral Helfrich had sent his fleet northwest into Karimata Channel. Consequently it was not available to strengthen our striking force in the east at this critical time.

The British were concentrating their attention and naval forces in the west, where the situation was critical. In Burma they were holding the line of the Salween River, but in the south, Moulmein, anchor of their right flank, was seriously threatened. The last reinforcements were being thrown into Singapore "under a hail of bombs running clear down to Banka Strait" and at the cost of the *Empress of Japan* sunk and the *Duchess of Bedford* and the U. S. S. *Wakefield* damaged. By the end of January ABDACOM decided to withdraw the British troops in Malaya to Singapore Island, and he again left Lembang to visit the great base. While General Wavell believed that Singapore might hold out indefinitely, it had become useless as a naval base. The Royal Navy was closing its dockyard—a bitter blow. ABDACOM's decision meant too that the RAF was forced to move from Singapore and base operations on Sumatra. But already the northern and eastern ports of Sumatra were too dangerous for merchant shipping and vessels had been sunk at Padang on the west coast and at Emmahaven just below.

In the face of these difficulties we did the best we could. Admiral Hart felt that the enemy force which had regathered in Makassar Strait and which again offered "some attractive targets" should be our next objective. Submarines were placed to protect Bandjermasin and Makassar, while repairs on the *Marblehead* and our destroyers were rushed to completion for another raid up the straits. But as our ships worked northward on the afternoon of February 1st they were sighted and shadowed by a Japanese plane. That night there was bright moonlight and our commander prudently decided not to attack a superior force (as our air reconnaissance had reported it to be) after the element of surprise had obviously been lost.

It was known that the Japanese were building up a force at Kendari and Staring Bay on the southeast coast of Celebes. While we were occupied with our unsuccessful attempt in Makassar Strait they moved in the Molucca Sea. On February 1st they bombed Laha airfield on Ceram and subsequently occupied it. On the same day a large convoy, reported to consist of 10 transports, 10 destroyers and 6 cruisers, approached Amboina, chief Dutch stronghold on the eastern flank of the Indies. The

Dutch and Australian air force there had been pretty well whittled down during previous raids, and within 2 or 3 days the island was in the possession of the Japanese. With it we lost a good battalion of Australians and "one of the best units of the Netherlands East Indies Army."

The difficulty in repairing and servicing our ships had convinced Admiral Hart that Port Darwin was too far removed from the scene of operations. Moreover, it had proven unsuitable as a base in other respects, and on January 29th he ordered our auxiliaries to move westward to Netherlands East Indies harbors. The ships sailed on February 3d and *Holland* and *Otus* arrived at Tjilatjap on the 10th. The move was late. On the same day that our auxiliaries left Darwin the Japanese, operating from their new bases, crossed the Java Sea to bomb Soerabaja and several other points in Java, as well as Timor. It was the first of a series of raids which were to make Soerabaja first difficult, then utterly untenable as a base. On this first raid most of the Dutch fighters were shot out of the air. Our own Navy planes escaped only because our tenders, always on the move, enabled them always to be elsewhere than where the Japs expected to find them.

The Japanese now controlled all the northern approaches to the Indies and would soon be in a position to move directly against the Soenda chain itself. It appeared that the bombing of Java and Timor marked the beginning of the "softening up" process. The need for a striking force capable of breaking up the next Japanese expedition was obvious.

To consider the creation of such a force Admiral Hart as ABDAFLOAT called a conference of Admiral Helfrich, Admiral Glassford, and Commodore Collins. They met at Lembang on February 2d. The Dutch cruisers and destroyers were now available and some British vessels had been released from the Singapore convoy. Of the American ships, *Boise* sailed for Colombo with a long gash in her bottom, but the *Houston* and *Marblehead* and some destroyers were ready for action. The *Langley* had just been sent to Fremantle on the southwest coast of Australia to load Army P-40 planes so desperately needed now in Java. It was decided to put the Dutch Rear Admiral, Karel W. F. M. Doorman, in charge of the force which was to assemble east of Java as soon as possible. It was realized that the tactical handling of the little fleet would present some difficulties, but there was no opportunity for joint training.

It looked as if we might at last have a force capable of smashing the

next Japanese expedition even if it should be heavily protected. But the promise of this start was short-lived.

ACTION OF MADOERA STRAIT, FEBRUARY 4[15]

On February 1st our air reconnaissance had reported a considerable enemy convoy at Balikpapan, presumably preparing for an advance on Makassar or Bandjermasin or both. It was reported to consist of 20 transports, 3 cruisers, and 10 destroyers. Enemy aircraft carriers were thought to be at Kendari or operating south of Celebes. Our plan was to strike this convoy before it could reach its objective. The words of Admiral Doorman's directive were: "Enemy transports will be attacked and destroyed in a night attack."

Admiral Doorman's striking force consisted of four cruisers, the *De Ruyter* (Admiral Doorman's flag), *Houston, Marblehead,* and *Tromp;* American Destroyer Division 58 led by Commander Binford on *Stewart,* with the *Edwards, Barker,* and *Bulmer;* and a Dutch destroyer division commanded by Lt. Comdr. Krips on the *Van Ghent,* with the *Piet Hein* and *Banckert.*

Our ships were at anchor in Bounder Roads, Madoera Island, when the Japanese planes passed over to bomb Soerabaja on February 3d and of course sighted our force. Nonetheless Admiral Doorman proceeded with his plans. Leaving in separate groups about midnight our vessels were to rendezvous at 0500 on February 4th, 5 miles north of Meyndertsdroogte Light. After assembling they were to start their run up Makassar Strait.

Having assembled according to plan, our force was zigzagging on an easterly course with a good trailing breeze and a moderate sea. The sky was partly overcast, but the mountains of Kangean Island could be seen rising out of the sea 35 miles to the north, and from time to time the high mountains of Bali and Lombok appeared through the clouds to the south. At 0935 Admiral Doorman warned his ships that 37 Japanese planes had been reported on their way toward Soerabaja on a southwest course. At this time our cruisers were in column 700 or 800 yards apart, with *De Ruyter* at the head, followed by *Houston, Marblehead,* and *Tromp* in order. The American destroyers were disposed as an antisubmarine and sound screen, while the three Netherlands de-

[15] This action is variously described as "Action North of Lombok Strait" and "Battle of Flores Sea."

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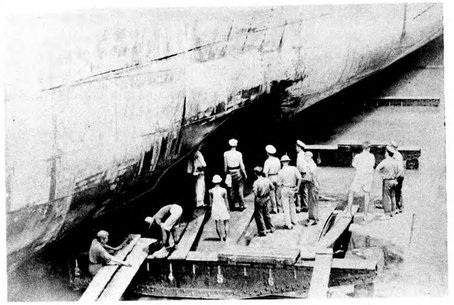
stroyers formed an antisubmarine guard astern. Our ships were at latitude 7°28′ S., longitude 115°37′ E., when at 0949 enemy bombing planes were first sighted. There appeared to be about 37 planes in groups of about 9.

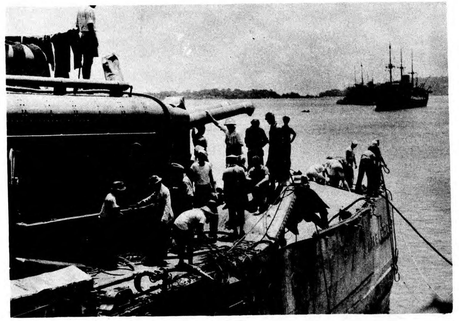
As our ships scattered, the plane groups separated to choose their targets. Their attack, which was to last all forenoon, was directed at the cruisers. Apparently the destroyers were not molested. The *Houston* successfully evaded all except the last bomb dropped at her. She had just maneuvered to avoid the attack of a group of planes when a single straggler came over. Its bomb, falling at a considerable angle, struck the leg of the mainmast and exploded on the main deck near the after turret. Fragments penetrated the barbette and turret and ignited the powder. The hit killed 48 men, wounded 20 more, and started an extremely serious fire. The after turret was so badly damaged that it was useless for the remainder of the campaign.

The *Marblehead* (which has turned in the most complete account of the action) fared no better. When the enemy planes were first sighted she manned all her antiaircraft batteries, while in the engine room all boilers were lighted off in preparation for full speed. At 0954 nine planes at about 17,000 feet approached the *Marblehead*. Their V-formation was so shallow that they were almost in line as they entered a power glide down to about 14,000 feet for a bombing approach. As they came in it could be seen that they were twin-engine, twin-tail, with a high-wing dihedral somewhat resembling the German JU86K. (The resemblance of the Japanese bombers to Junkers had been remarked at the time of the destruction of Cavite Navy Yard.) Our antiaircraft batteries opened fire and the ship maneuvered to keep them bearing. When the planes reached their bomb-release point the ship turned sharply. The planes did not release but passed and circled to gain altitude for a second approach.

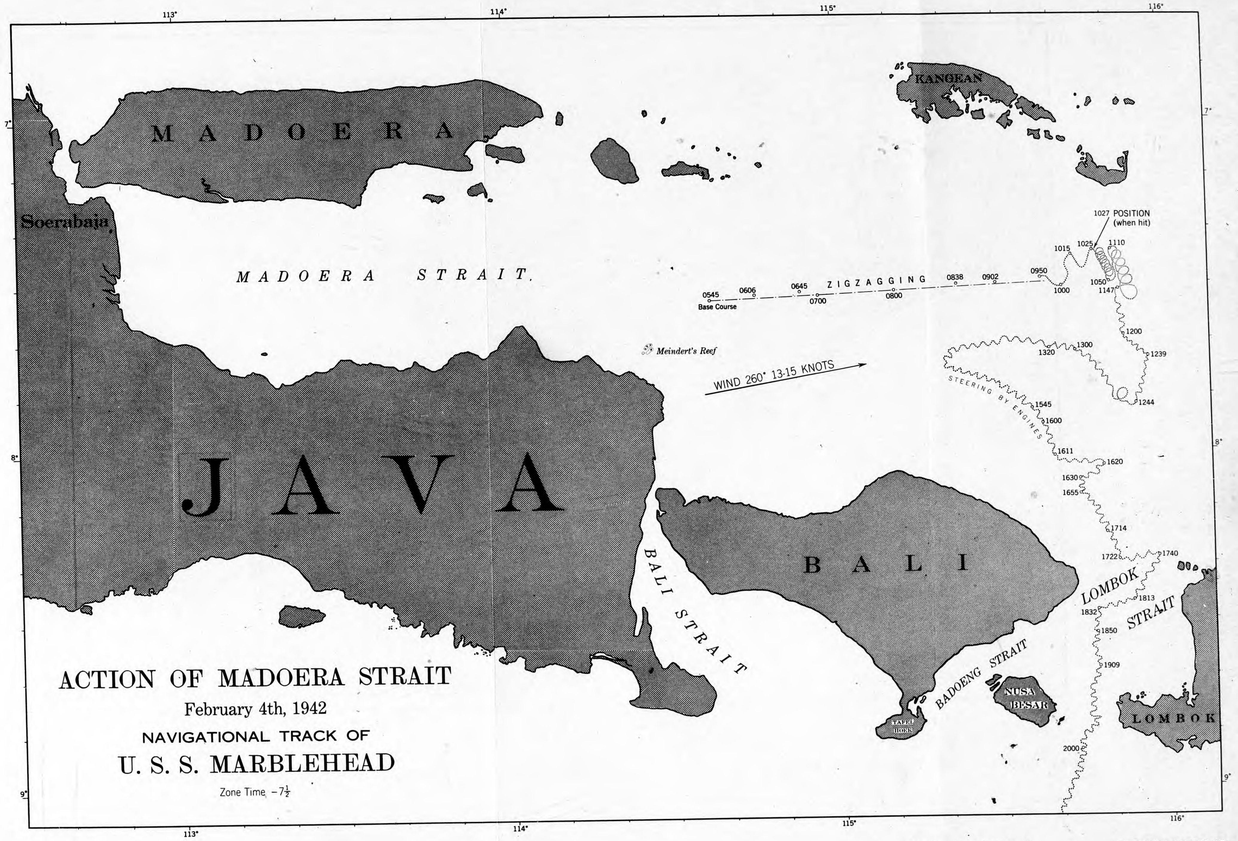
During the next few minutes the planes made several runs. The *Marblehead* ran at full speed, heeling far over as she maneuvered. On one of the runs our pointers got the range and one of the planes began to smoke. At 1018 a flight approached from starboard—apparently the same that had made the first attack. Our gunners hit one. Its bomb load exploded and the plane disintegrated in the air. The others dropped their bombs, but the ship was swinging with right full rudder and a stick of seven fell 50–100 yards away on the port bow. That was close enough, for the shrapnel sprayed the ship so that the men below decks



Damage to hull of *Marblehead*, port side forward, the result of a near hit in Madoera Strait.



Fantail of *Marblehead* after bomb hit in Madoera Strait action.



ACTION OF MADOERA STRAIT

February 4th, 1942

NAVIGATIONAL TRACK OF

U. S. S. MARBLEHEAD

Zone Time, −7½

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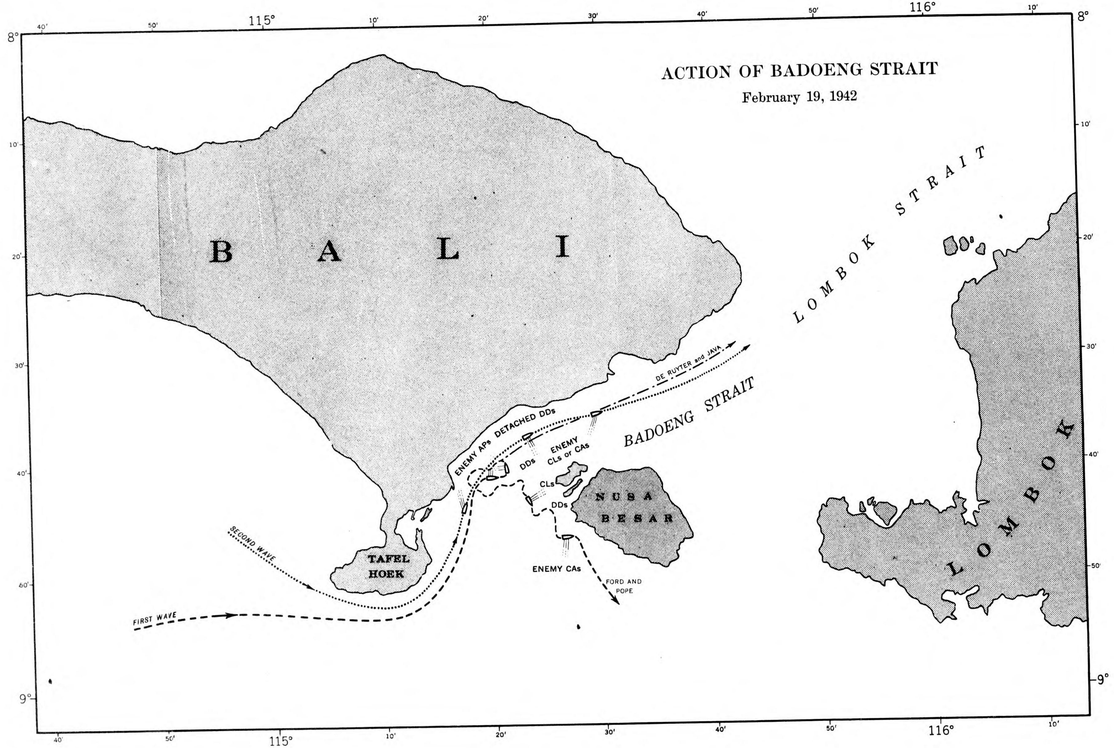
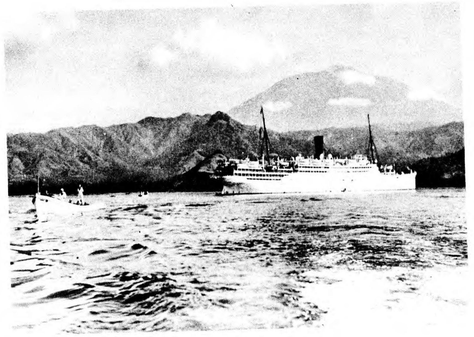




The Island of Bali.

Oil tanks at Palembang, Sumatra.

described the sound as "like gravel thrown against the ship" or "like the ship's scraping over a gravel shoal." A minute later another plane, apparently damaged by our fire, was seen spiraling downward on the starboard bow in an effort to crash into the ship. Our 50-caliber machine guns opened fire on it; the tracers could be seen tearing through it and it broke into fragments as it struck the water 1,000 yards off the port bow.

It was too much to hope to go on dodging bombs indefinitely. This flight was immediately followed by a new one of seven planes of a different type. These single-engine planes were seen approaching at 1026. The ship turned with left full rudder but the evasion did not work. A stick of seven bombs straddled the ship perfectly for two direct hits and a very near hit which was almost at damaging.

One hit was in the forward section (frame 47) about 10 feet from the starboard side. It sheared the inboard side of the starboard motor launch, which probably started its fuse mechanism, so that after passing through the upper deck it exploded as it entered the main deck. The upward force of the explosion bowed the upper deck about a foot, starting seams and rivets. Laterally the blast spread destruction far and wide through that section of the ship (the wardroom and officers' country), and bent the forward uptakes. The downward force of the blast demolished the sick bay and fragments penetrated the top of the fuel tank below the sick bay. All electric, steam, and water lines (except the fire main) in the area were ruptured; but the sides of the ship were not penetrated. Fires were started throughout the area.

The second bomb hit on the fantail, abaft the after twin mount and close to port. It passed through the main deck and exploded in the hand-steering room. The explosion lifted the main deck and blew a flap of it upward against the under side of the guns of the twin mount, which was put completely out of action. This, however, permitted some of the force of the explosion to escape aft and probably reduced the damage which might otherwise have resulted. The chief petty officers' quarters and the adjacent crew's quarters were demolished. All steering gear and the hand-steering room were utterly disabled, and the rudder was jammed full left. Fuel tanks were ruptured and fires started. There were several ruptures in the sides of the vessel.

The near hit exploded below the turn of the bilge, on the port side at frame 24, tearing a hole about 3 by 9 feet in the bottom. The deck was driven up 10 inches over a length of about 8 feet, but did not break.

The "dished in area" formed a great scoop which forced water into the ship at high pressure as she continued steaming. Moreover, the opening of seams and rivets started leaks in other forward sections, so that the peak tank was flooded as were most of the compartments below the first platform deck and forward of frame 34.

The shock of the explosion gave the ship a sharp list to starboard, and she settled by the head, so that her draft forward ultimately reached 30 feet. Fortunately the main engines were not damaged, and after fire-rooms 1 and 2 had been secured because of ruptured uptakes she was still able to do 25 knots. Because of the jammed rudder the ship was steaming in a circle to port.

This was as good a defense against air attack as was available at the moment. Not long after the hits more planes appeared on the starboard bow, but disappeared without attacking. A few minutes later two flights appeared on the port bow. Our gunners opened fire with all they had, but the forward director was wrecked, the fire control circuit was broken, and only voice telephones were working. The planes passed but soon circled back. A little later our men could see geysers springing up close to the *De Ruyter*. Subsequently the *De Ruyter* reported that she had been straddled on two occasions by near hits which put her antiaircraft fire control out of action. Again planes approached the *Marblehead,* but they broke off their attack too soon and their bombs fell 2,000 yards away. Shortly afterwards a reconnaissance plane circled the ship at 3,000 feet.

Several times *Tromp* approached *Marblehead* to take off survivors if it should become necessary, as it seemed it well might. Fires were raging fore and aft. Damage-control crews and all unengaged men were busy fighting them or caring for the wounded. The executive officer had come to the bridge severely burned and his place had been taken by the gunnery officer. The damage-control officer supervised the fire fighting and efforts to free the rudder. By 1100 the fires were under control, but arcs from broken electric cables constantly started new ones in the oil-filled compartments. It was not till 1300 that the rudder angle was reduced to about 9° left.

There were 70 or 80 casualties, several fatal and many serious, in addition to many minor injuries which did not take men out of action. The forward battle dressing station and collecting station had been destroyed and the amidship station was untenable, so that the wounded had to be

carried aft to a makeshift station in the torpedo workshop. This was no easy task on slanting decks made slippery with oil.

Some time after noon the Japanese planes left. The *Marblehead,* steering with her engines, began working south toward Lombok Strait. Submersible pumps were in action and in addition bucket brigades were formed to remove water from the CPO quarters and the sick bay area forward. Work was impeded by some 20 tons of water loose on the main deck, chiefly from within the ship.

At 1255 Admiral Doorman ordered his ships westward and the *Marblehead* changed course to comply. *Edwards* and *Stewart* formed an anti-submarine screen for her. At 1415 Admiral Doorman gave permission for the *Marblehead* to proceed via Lombok Strait to Tjilatjap for repairs, and she again turned south, escorted by Destroyer Division 58. Her speed was about 20 knots, which was high for a ship in her condition; but it seemed advisable to get as far to the south as possible and to get well into Lombok Strait before dark, especially as a strange plane was sighted in the evening, apparently shadowing our ships. The *De Ruyter* and the three Netherlands destroyers accompanied the American ships until midnight, when the strait was cleared. All through the night the bucket brigade kept at work and the water was controlled, although at the time 26 watertight compartments were completely, and 8 more were partially flooded. It seemed that the ship was kept afloat as much by the determination of her captain and crew as by her own buoyancy.

Through the forenoon of the 5th a plane shadowed our ships, so that they held to a southerly course till noon in order to conceal their destination. They approached Tjilatjap in the early morning of the 6th, and soon after noon the *Marblehead* was berthed alongside the *Houston.*

The commercial floating drydock at Tjilatjap was large enough to raise only one end of the *Marblehead* at a time, and this proved a delicate and difficult task. The bow was raised sufficiently to patch the hole in her bottom, but the ship could not be entirely emptied of water or made completely watertight. The stern could not be lifted clear, so that the rudder could not be repaired, but a wooden deck was built over the fantail, the ship was cleared of debris and was made habitable.

Work was pushed day and night, for it was realized that the Japanese might raid Tjilatjap at any time. When the leaks had been patched so that the submersible pumps could cope with the water the ship put to sea.

This was February 13th. She was scarcely seaworthy, but it was thought that she would be safer at sea than in Tjilatjap. The story of her return home does not lie within the scope of this narrative, but it is one of the great stories of the sea. In the 48 days which followed the action the ship steamed more than 9,000 miles, touching Trincomalee (Ceylon), Durban, Port Elizabeth, and Simonstown (South Africa). Almost half this distance was covered without a rudder and the remainder of the voyage was made with the rudder controlled from the steering engine room.

The *Houston,* although her after turret was demolished, was otherwise seaworthy and was still the most powerful ship available in the area. It was hoped that she could be sent home for repairs when the *Phoenix* arrived, but meanwhile she was sent to escort troops from Darwin to Koepang (Timor) to aid in defending the airfield there. This field was of some importance not only because it partially covered the approach to Darwin, but because it could be used as a stop for our fighter-plane ferry. We had been flying P–40's from Darwin to Java via Timor, but the flight was too near the limit of their range. So many were lost that General Brereton finally had to halt the use of this route. It was this that made the *Langley's* voyage important.

While the American cruisers stopped at Tjilatjap, Admiral Doorman with his remaining ships continued westward and eventually arrived at Batavia via Soenda Strait. While our striking force was in the west, an enemy convoy was south of Celebes for a day (February 7th–8th). Our planes scouted it, but our ships were not within striking distance. As soon as Admiral Doorman's retirement was known to ABDAFLOAT he was ordered to send his ships back to eastern Java, while the Admiral himself came to Tjilatjap for a conference with Admiral Hart.

THE BANKA ISLAND ATTEMPT,[16] FEBRUARY 13–14

During this conference it was learned that a Japanese expedition was coming from the Molucca Sea around the southeast corner of Celebes near Bouton Island. Its destination was not clear, but Admiral Hart believed it might be heading for Bandjermasin, chief city of southeast Borneo, or even eastern Java. He saw that if the enemy attempted either of these moves we must make at least a night attack, and Admiral

[16] Also described as the Gaspar Strait action.

Doorman was ordered to make plans and get his fleet in readiness. The plan was to assemble southwest of Bali, and our ships began to leave port at once. But the enemy expedition moved only around the south of Celebes to take Makassar on the southwest coast, and there was no opportunity to strike.

As a matter of fact, we were faced with a dilemma. The Japanese were now closing in on Java from both sides and we had scarcely the strength to stop either arm of the envelopment. In Burma the Japs took Martaban on the 11th, thus turning the flank of the Salween line and forcing the British to withdraw to the Bilin River, which offered a much less favorable line of defense. The Japanese were already on Singapore Island, and there were indications that they would not wait for its fall before moving on Sumatra or attacking Java from the northwest. On February 5th a large force was sighted in the Anambas Islands northeast of Singapore, and on the 7th a convoy was reported near Banka Island, east of southern Sumatra.

While this danger appeared in the west, the situation on the east was no less threatening. The Japanese now controlled southern Celebes. They were known to have built up an important base at Kendari and to have considerable air power based there. From that region they could attack Bali, Madoera or eastern Java directly.

In which direction should we turn our striking force? Where was the enemy likely to move first? Bad weather or enemy air opposition interfered with our reconnaissance at this critical juncture and so delayed this important decision. Meanwhile the Japanese were making good use of their positions, bombing Port Moresby, Koepang, and other cities. Soerabaja was bombed repeatedly, and Batavia received its initiation in aerial bombing on the 9th.

As it turned out, the Japanese advanced about simultaneously in east and west. On the 11th they converged on Bandjermasin and 2 days later claimed to have taken it. On the 14th, the day before Singapore surrendered but when its fate was already sealed, they opened their attack on Palembang in southeast Sumatra. This region was a valuable prize indeed, as it produced more than half the oil of the Indies. The Dutch repulsed the first attack by paratroops, but the following day, while Singapore was falling in the north, the Japanese brought in their infantry, seemingly from the convoy which had been waiting in the Anambas Islands. The Dutch were overwhelmed and could only fire their wells

and tanks before the area passed to the enemy. At the same time it was learned that another enemy convoy was on the move from Balikpapan.

On the 13th, as soon as the enemy's intentions became clear, Admiral Doorman's little striking force jumped off to meet the threat to Palembang.

Although he did not have the American cruisers, *De Ruyter* and *Tromp* had been reinforced by the British heavy cruiser *Exeter* and the Australian light cruiser *Hobart.* There were six American [17] and several British destroyers, in addition to the Dutch. That gave him a total of four good cruisers with adequate destroyer support, and he was told that "he should consider the advisability of an attack upon enemy expeditions by day as well as by night in view of the considerably increased power of his force."

On the way northwest the Dutch destroyer *Van Ghent* ran aground and was lost. *Banckert* remained behind to take off her crew, but the rest of the force reached the area northeast of Banka Island on the night of February 13th–14th. It was 24 hours too late. The Japanese were already in Banka Strait and were advancing up the river. On the 14th our ships were bombed repeatedly. They escaped any serious damage, although the *Hobart* was straddled and two of our destroyers, *Barker* and *Bulmer,* were somewhat shaken up by near hits. Admiral Doorman did not dare rush the straits, particularly with the enemy in complete control of the air. Bright moonlight precluded any surprise by night, and there seemed no point in remaining to be bombed again by day. Consequently he retired to Batavia on the morning of the 15th without having accomplished anything.

ANOTHER MOVE TO THE SOUTH

On February 14th Admiral Hart surrendered Operational Command of Allied Naval Forces in the Southwest Pacific to Vice Admiral Helfrich, and shortly afterwards returned to the United States. Admiral Helfrich was succeeded as CZM (Dutch Naval Commander) by Rear Admiral van Staveren. The Chief of Staff of the Allied Naval Command, Admiral Palliser, was British, so that the United States was left with little representation on the High Command. Our senior naval officer in the area was Admiral Glassford, who had been since the end of

[17] There is no official report, but it appears that the American destroyers participating in this action were *Stewart, Barker, Bulmer, Pillsbury, Parrott,* and *John D. Edwards.*

January Commander of United States Naval Forces in the Southwest Pacific, a position which he continued to hold under Admiral Helfrich as ABDAFLOAT until the first of March, when the Allied Command was dissolved.

The situation which now confronted Admiral Helfrich was desperate. The Japanese in Sumatra would soon be in a position to advance on Soenda Strait, perhaps close it and invade Java from the west. The Japanese in Borneo and Celebes were ready to advance on Bali or Soembawa or even eastern Java and close the eastern straits. The danger of finding our ships trapped in the Java Sea was already apparent. The need for keeping them there to meet the next Japanese advance toward Java was equally evident.

Upon taking command of the American fleet, Admiral Glassford remained at Bandoeng, to which he moved his operational staff from Soerabaja. He left at the latter place only an Administrative Office under his Chief of Staff, Admiral Purnell. The Dutch Admiral, van Staveren, also moved from Batavia to Bandoeng, so that the Dutch and American commands were together and near General Wavell at Lembang.

Soerabaja was being bombed daily, so that our ships could use it only when darkness grounded the Japanese planes. (Their fields were not equipped for night operations.) If the Japanese should occupy Bali, as it appeared they might, the port would become utterly untenable. Accordingly the American administrative office was shifted to Tjilatjap on February 19th and our smaller auxiliaries soon followed. This amounted to the practical abandonment of Soerabaja as a base. Only our submarines and our reconnaissance aircraft continued to operate from there, the former submerging during the daily air attacks and the latter being well dispersed and constantly moved. It was with great reluctance that our forces left Soerabaja. Its fuel supplies were ample, its repair facilities good, and its recreational opportunities of considerable value to our men.

It was clearly realized that even Tjilatjap could be only a temporary stopping place. Its remoteness from Japanese air bases in Borneo and Celebes gave it a comparative security for the moment, but the Japanese advance in Sumatra already imperiled it and their establishment in Bali would make it unusable. Admiral Glassford expressed surprise that the Japs did not bomb the ships concentrated in Tjilatjap before we left it, and attributed it to a kind Providence. But the next base on our line of

retreat would have to be far away, so that we kept our ships at Tjilatjap until the enemy actually landed on Java. Port Darwin was the closest available base, but it had already been found unsatisfactory. Neither was it secure, as it was soon to be amply demonstrated.

Accordingly it was decided to prepare for our leaving Java by sending our auxiliaries south. Too little was known of the harbors of western Australia and adequate charts were not available, but Exmouth Gulf was chosen as the nearest point out of range of enemy shore-based planes and yet close enough for our forces to strike at the enemy. The *Holland,* accompanied by two submarines in need of overhaul left Tjilatjap on the 19th. The *Black Hawk* left the following day with the destroyers *Bulmer* and *Barker,* which had been badly shaken up by bombing near Banka Island.

The tanker *Pecos* was held till the 25th in an attempt to remove some of the oil from Tjilatjap, but the Dutch could not bring themselves to believe that Java could be lost and consequently were unwilling to remove oil from either Soerabaja or Tjilatjap until it was too late. The fuel situation was becoming actute. The *Erling Brovig,* under charter to our Navy, had been sent to Ceylon for fuel, and the *Trinity* had sailed for Persia on the same errand. The *George D. Henry* had been filled at Darwin and was waiting at Fremantle for orders.

JAPANESE AIR ATTACK ON DARWIN, FEBRUARY 19

Shortly after midnight on February 15th, a fast troop convoy had left Darwin. Aboard the *Mauna Loa* and the *Meigs* were Australian troops while the *Tulagi* and the *Portmar* carried a U. S. infantry regiment. Their purpose was to reinforce the garrison at Koepang, in Timor, and to establish a base there. As escorts, Admiral Glassford had provided the *Houston* and the *Peary.* About noon on the 15th, two heavy four-engined Japanese seaplanes were sighted. The *Houston* fired unsuccessfully, and the planes circled at a high altitude for about an hour before departing for the north. Though one report states that two bombs were dropped at this time, it seems likely that this was a reconnaissance flight only. After the planes had left, the convoy reformed and continued on its way.

On the 16th the convoy was severely bombed. The attacking planes were described as *carrier-based,* though they are elsewhere described as

heavy bombers. Flying at a high altitude in three horizontal rows of nine planes each, they approached from the east. The first wave concentrated on the *Houston,* and each plane dropped one bomb. The Japanese scored no hits, and likewise the *Houston's* fire had no visible effects. Out of the second wave, however, she shot down 7 of the 44 enemy planes, and her recently provided antiaircraft equipment proved of great value in protecting the convoy. This second attack used a formation similar to the first, but the planes came from the southwest—an unexpected quarter. By this time the convoy had scattered, and each vessel sought protection by radical maneuvering and high speed. The planes attacked in groups of 9, the first one heading for the *Houston* and each successive one concentrating on a transport. The *Mauna Loa* received a glancing blow, and all 4 transports started leaks from near hits. The number of bombs dropped may be gauged by the *Portmar's* report that 23 bombs had landed within 200 feet, although the *Meigs* had been able to lay down a smoke screen for her.

Though the enemy's attack had failed, the position of the convoy was obviously precarious. The presence of a Japanese carrier was likely, and Japanese warships were rumored to be lying in wait near Timor. The ships reassembled, however, and continued on their northward course for several hours. A scouting plane from the *Houston* was launched in an effort to gain information of the enemy's position. Soon afterwards directions were received to return again to Darwin, and by the morning of the 18th the convoy had safely reached the port.

Limited facilities caused the *Portmar* and the *Tulagi* to anchor in the harbor, while the *Meigs* and the *Mauna Loa* proceeded to the dock so the troops aboard might disembark. The *Houston* and *Peary* refueled at once and by the evening of the 18th had headed out to the west. They had been ordered to join Admiral Doorman's striking force, which was preparing to defend Bali from invasion. A prolonged attack on an enemy submarine outside of Darwin delayed the *Peary,* however, and she was directed to return to port for refueling while the *Houston* proceeded independently. For this reason the destroyer was at Darwin during the attack on the 19th.

The airport, warehouses, docks, and virtually every ship in Darwin Harbor was destroyed by severe air attack on the 19th. A total of about 72 high-level bombers and 18 dive bombers were used, and the almost complete lack of defenses resulted in much damage. The city itself was

strafed and set aflame, and so severe was the destruction that the evacuation of the entire area was ordered by nightfall.

At 0955 18 heavy bombers appeared, flying in horizontal rows of 4, with 2 planes bringing up the rear. Their size indicates that they were based on carriers or seaplane tenders. No warning of their approach was given though they came from the south; proper identification was presumably not made because once again the attack came from an unexpected quarter. The docks were the first targets. By this time the *Meigs* and the *Mauna Loa* had unloaded the troops and were anchored in the harbor, with their equipment and ammunition still aboard. The British ships, *Zealandia* and *Neptuna* were at the dock, however, discharging ammunition and both these vessels were hit. Shattering explosions and brilliant flashes shook the area as the *Neptuna* blew up and turned on its side. Hits scored on a Norwegian tanker, the *Benjamin Franklin,* and another vessel caused loud and extensive detonations. Hits on the docks themselves started fires and scattered debris over a wide area. Though all the bombing was done at a high level it was accurate. Meeting practically no defense, the planes could afford to take their time, and while the dive bombers were attacking, the big bombers would circle around without even dropping bombs.

The airport was next subjected to a severe bombing attack by a second wave of high level bombers. Two—perhaps four—of our planes were able to take off and a P-40 shot down a dive bomber before succumbing to the hopeless odds. A survivor from the *Mauna Loa* described the destruction at the airport as "like the battle fields of France; hangars, planes, and everything blown to bits, burnt holes all over the field." For over 24 hours fires burned from gas tanks and ammunition dumps.

Immediately following the second wave of high level bombers came the dive bombers, painted a dull green in contrast to the bigger planes which were reported as "shining like silver, with a red sun and a burst of red and gold stripes." The single-engined dive bombers swung in on their individual targets at low angles of not more than 50°. By this time many vessels were heading for the harbor entrance, some dragging anchor in their haste to escape. The *British Motorist,* a tanker which had backed away from the dock during the first attack, had now managed to back into the harbor, but she got no farther. The Japanese planes first concentrated on the transports and naval vessels, then attacked each merchantman in turn. For over 2 hours harbor shipping and shore facilities endured almost continuous attacks.

The destroyer *Peary* was hit five times by Japanese dive bombers. While trying to put a smoke screen around the Australian hospital ship *Manunda,* she was hit on the fantail, removing the depth charge racks, propeller guards, and flooding the steering motor room. An incendiary bomb landed near the galley, while the third went through the fire room without exploding. The fourth bomb set off the forward ammunition magazines, while the last an incendiary, exploded in the after engine room. Though the ship was damaged severely, her machine guns continued to blaze until the last enemy plane had departed. She sank stern first at about 1300, with a loss of all but 52 men of her crew. One officer survived. The *Manunda,* which the *Peary* had been protecting, was also hit by a bomb which failed to explode, and was strafed several times.

The transports were also hit. The *Meigs* and the *Mauna Loa* were sunk, and the *Portmar* beached. Details of damage to the *Tulagi* are not available. The latter two vessels still had troops aboard but casualties seem to have been small. The *William B. Preston,* a U. S. destroyer-type seaplane tender, was severely damaged. She had been operating our reconnaissance PBY's with her base at Darwin, but after the raid she was forced to seek shelter at Broome. The *Admiral Halstead,* an American cargo vessel loaded with 14,000 drums of aviation gasoline, was strafed and had her plates sprung by near hits but escaped more serious damage. After the raid she was brought to a pier where Army volunteers and survivors of the United States and Philippine merchant vessels helped to unload her. The *Don Isidro* was also bombed by the Japanese, starting a fire which gutted her and necessitated beaching her near Melville Island.

Besides bombing the relatively unprotected transports and merchant ships the enemy dive bombers executed machine-gun attacks at the ships' decks from a level of about 50 feet. Sustained machine-gun and cannon fire caused many casualties among the crews and troops seeking refuge ashore. Their small boats were mercilessly attacked. The city was also subjected to low-level attacks, and the hospital was hit. That night evacuation of the city was ordered, and the Army directed everyone to head south. Gas tanks, warehouses, as well as many localities in

the city were afire, and ammunition dumps continued to explode. The road south was soon blocked with vehicles of every description loaded with whatever could be salvaged.

ACTION IN BADOENG STRAIT, FEBRUARY 19–20

Northwest of Port Darwin, meanwhile, heavy bombing of Bali indicated that that island would be the next objective. About the middle of February this softening process had begun, and an enemy advance west from Celebes became apparent. Submarines were therefore withdrawn from the entire length of Makassar Strait to defensive positions off Bali and Timor. Likewise the striking force, which had been patrolling the West Java Sea, was ordered from Priok to a new base at Soerabaja. It was this force which the *Houston* had been ordered to join from Darwin, but she failed to arrive in time for the attack made in Badoeng Strait, off Bali, on the night of February 19th–20th.

On the 18th Japanese forces landed on the southeast coast of Bali and seized the airfield there. Consolidation of this position and use of the field would naturally expose the entire sea area south of the Barrier Islands to air attack, so that quick action on our part was essential. Admiral Doorman therefore decided on a night raid on the vessels used in the landing. Reconnaissance revealed that at least two cruisers and three transports were anchored in Badoeng Strait southeast of Bali.

An attack was planned in three waves. The Dutch cruisers *De Ruyter* and *Java* were to come from Tjilatjap, accompanied by the destroyers *Piet Hein, Ford* and *Pope*. The second wave was to include *Tromp, Stewart, Parrott, John D. Edwards,* and *Pillsbury,* all of which were to come south from Soerabaja through Bali Strait, round the southern tip of Bali, then turn north into Badoeng Strait to make their attack. Dutch torpedo boats from Soerabaja were to conclude our attack. Approach from the southwest was planned, and after the attack our ships were directed to proceed through Lombok Strait and thence back to Soerabaja.[18] The four submarines on patrol in that area were therefore told to haul clear and resume their stations at dawn on the 20th.

The actual engagement proved successful, though accurate reporting of damage is difficult in a night battle. Two or three ships were fired by the first group, which may also have torpedoed a cruiser of the *Katori*

[18] See chart opposite p. 29.

class. The second and third waves each made sure torpedo hits on ships of unknown class. We lost the Dutch destroyer *Piet Hein,* while the *Java* and the *Tromp* were damaged. Our destroyer *Stewart* was also hit. The Japanese disposition in two groups enabled our single column formation to pass between, and caused the enemy to fire on his own ships.

The cruiser group attacked first, with *De Ruyter* in the lead, followed by *Java, Piet Hein, Ford,* and *Pope* in the order named. Arrival off the south coast of Bali took place as scheduled at about 2130 on the 19th. An hour later the action began. The cruisers' searchlights illuminated two enemy vessels off the port bow, and firing from the gun batteries began at once.[19] The return fire was almost immediate, indicating that an attack had been expected. The enemy ships were stationed, however, as if our forces had been expected from the north, but the initial advantage as to disposition was with the Japanese, for the coastline behind their vessels made our targets less distinct. In this exchange the *Java* was hit on the stern, but damage was slight.

The destroyers in this first wave bore the brunt of the fighting, especially *Ford* and *Pope,* which gave an exceptionally good account of themselves. As the three destroyers were about 3 miles behind the cruisers when contact with the enemy was made, the first clue that action was joined came from searchlights and red star shells. Before they could themselves bear on any targets, *Piet Hein* turned radically to the right, laying a smoke screen of white and black smoke. *Pope* and *Ford* followed. Off the port beam an enemy warship or transport was then silhouetted, at a range of about 3,000 yards. Another vessel reported as a cruiser appeared off the port bow. Apparently the warships were underway, but they were moving slowly, taking advantage of Bali's coastline. *Piet Hein* opened fire with her guns,[20] while the *Ford* fired three torpedoes. One hit was believed made on the cruiser, later reported to be of the *Katori* class. As the last torpedo was released, *Piet Hein* was enveloped in flames. Whether she had been hit by large caliber gunfire or by a torpedo is not known, but *Ford* noted that she did not settle as if holed below the water line. *Pope* meanwhile in the rear of the column saw two ships in flames, and herself fired two torpedoes at the enemy

[19] *De Ruyter* did not get into the action and did not fire a shot. Commander Binford has suggested that she had been designated to fire to starboard. As the only ships sighted were to port, this order may have rendered *De Ruyter* ineffective.

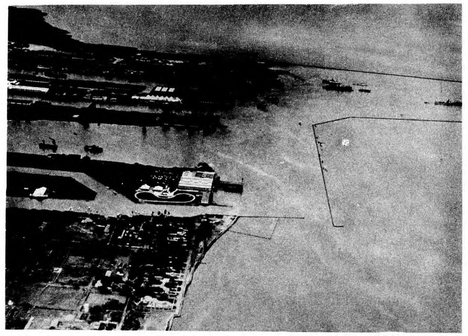
[20] The fact that *Piet Hein* used her guns before releasing torpedoes may have rendered her less effective and more vulnerable than the American destroyers.

transport or cruiser on her port beam. The hit scored may have been made by either *Pope* or *Ford*. At about the time the *Piet Hein* was hit a shell cut the after falls of *Ford's* whaleboat, necessitating cutting the forward falls and dropping the boat overboard. Apparently it landed right side up, for at dawn 13 *Piet Hein* survivors climbed aboard. They salvaged a floating gas drum, rescued 20 more Dutch survivors, and then made their way to Java in safety.

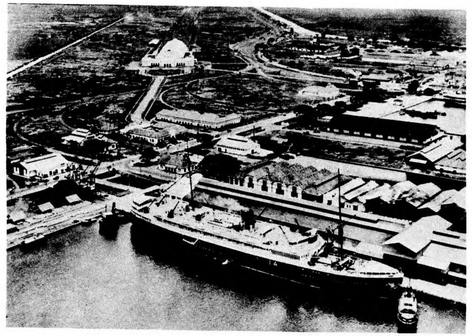
After *Piet Hein* had been hit all three destroyers slowed radically. Contact with the cruisers had been lost some minutes before, and now, of course, the Dutch destroyer was out of the action. *Pope* and *Ford* fired two more torpedoes apiece at the transport on their port beam but reported no hits. Gunfire from port caused *Ford* to make smoke and head toward Bali. Course was then changed to south, and then to the southeast. During this time enemy vessels from the north opened fire, and *Pope* responded with a torpedo which reportedly hit a destroyer off her port quarter.

About 2300 a searchlight illuminated *Ford*, and she immediately came under heavy fire. A big cruiser was about 2,500 yards to starboard, and *Ford* was virtually smothered by near hits from main and secondary batteries. The pattern of enemy fire was excellent, and the searchlight was brilliant, well-controlled, and focused. Our destroyers took prompt action. Both turned on fighting lights, and changed course sharply toward Nusa Besar. *Ford* launched three of her starboard torpedoes but as the target angle was sharp hits were not observed. As the enemy cruiser continued to concentrate its fire on *Ford*, *Pope* fired five of her torpedoes and then opened fire with her guns. Although no hits could be seen the cruiser ceased firing and turned off its searchlight. Our destroyers followed suit. This phase of the engagement had lasted only 5 minutes. The known disposition of superior forces to the north caused *Ford* and *Pope* to retire to the southeast and then along Java's south coast to Tjilatjap, rather than proceeding to the planned rendezvous at Soerabaja.

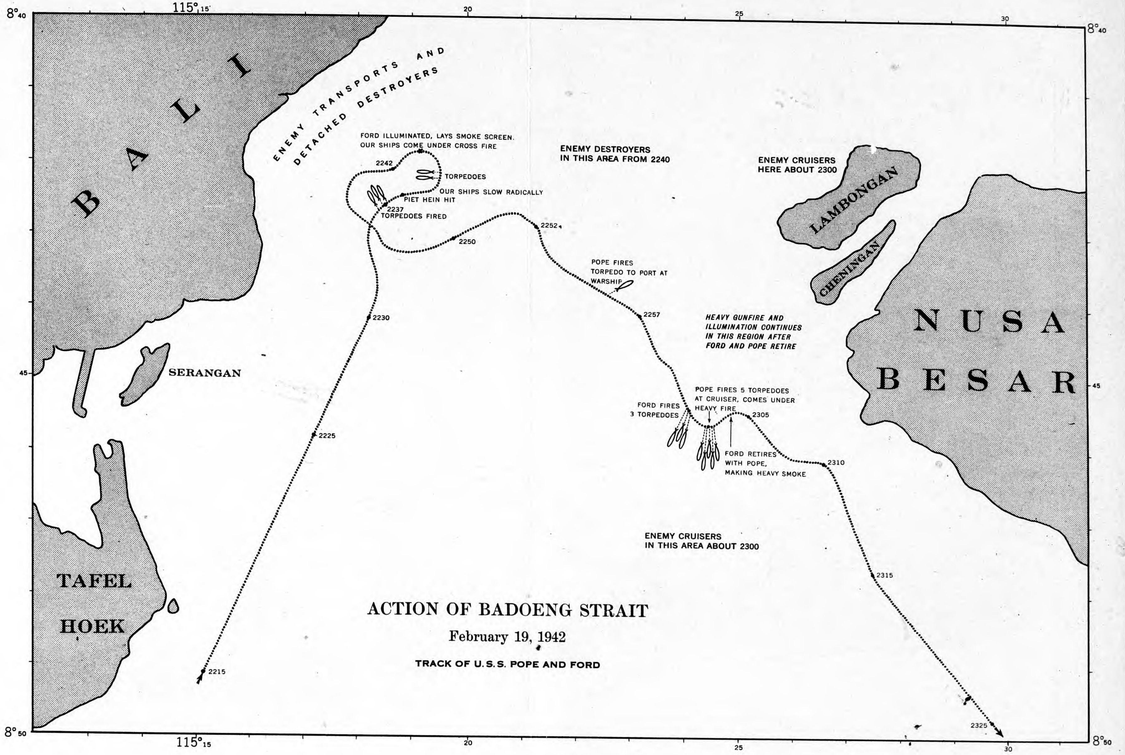
Heavy gunfire continued in the area that *Ford* and *Pope* had just cleared. Several destroyers in column were illuminated, and two were seen to burst into flames. Our destroyers at first thought the Dutch motor torpedo boats were starting their run through the enemy force, but it is more likely that the Japanese were firing at each other. Their crossfire had endangered our ships but the risk proved amply justified by the

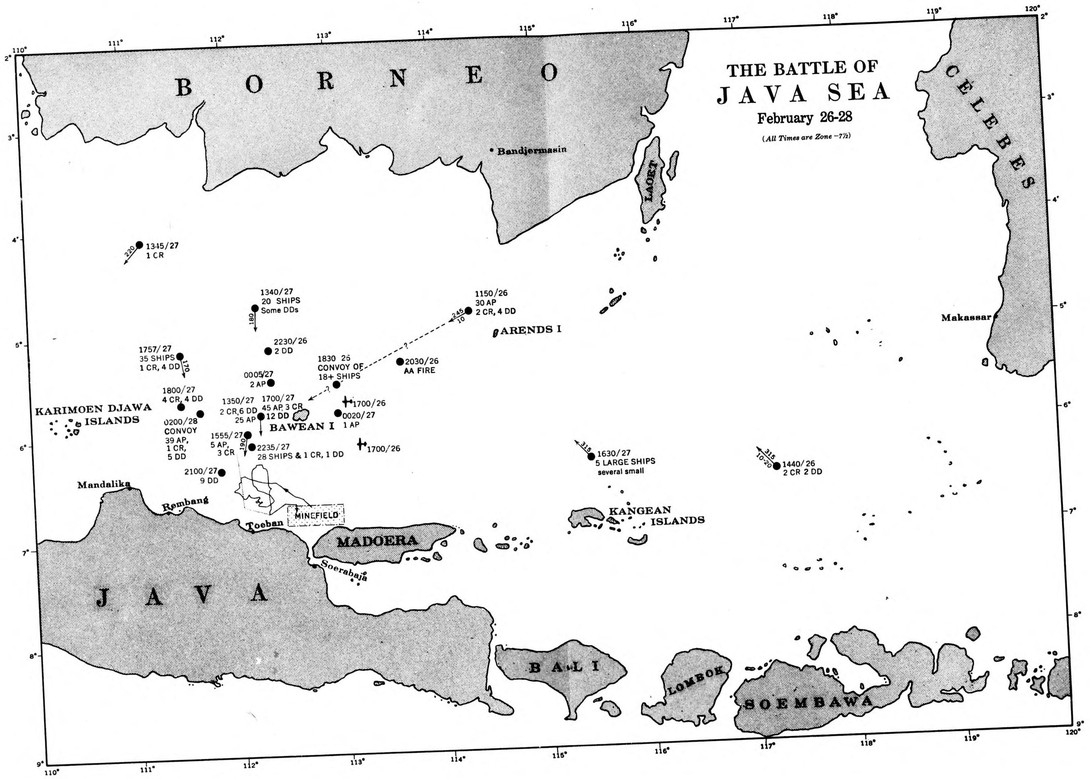


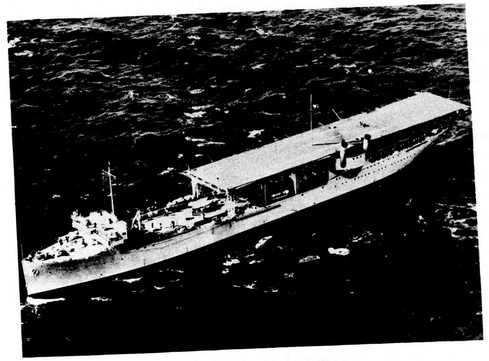
Tandjong Priok, port of Batavia.



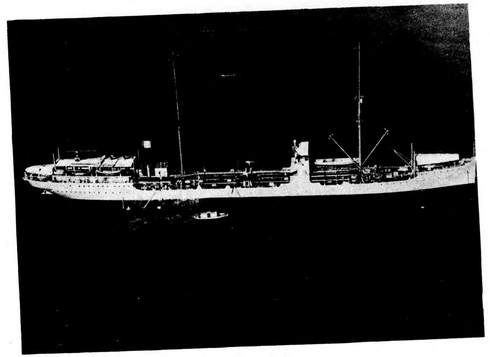
Tandjong Priok, showing Batavia railway station and navigable canals.







The seaplane tender *Langley*.



The oiler *Pecos*.

damage which they inflicted on themselves. Two enemy destroyers were believed sunk and another severely damaged at this time.

As the second wave, consisting of the United States destroyers *Stewart, Parrott, J. D. Edwards,* and *Pillsbury,* with the Dutch cruiser *Tromp* 5 miles astern, approached Badoeng Strait they could see two fires on or near the beach of Bali. Previously searchlights and heavy gunfire had indicated that our first wave had engaged the enemy, but as voice radios failed to establish contact with them we were able to get no information about the disposition or composition of the enemy forces. This proved a handicap, as the Japanese were close to Nusa Besar Island and the second wave passed too far to the north to make the torpedoes as effective as they might have been at closer ranges.

At 0134 *Stewart* at the head of our column sighted two ships signalling off the port bow. The free use which Japanese warships made of a high-intensity, all-round signal light with a greenish hue was advantageous in spotting these ships and others later in the engagement. They were against the dark background of Bali and the haze resulting from the earlier engagement made their outlines indistinct. Our ships on the other hand were clearly outlined in the bright starlight. As our column veered to starboard, the *Stewart* and *Parrott* each fired six torpedoes from their port batteries. No hits were scored and the ships were directed to hold their torpedo fire. A few minutes later enemy searchlights revealed one of their own vessels off the port quarter and our destroyers opened fire with their torpedoes and guns. A cruiser some 4,000 yards off the port bow and farther inshore immediately illuminated the *Stewart* and our column was soon heavily engaged. Fire from 8-inch batteries landed over and ahead of the *Stewart,* which was the only one of the destroyers to receive a direct hit. A shell went clear through her without exploding, but the after steering control station was damaged. Astern, the *Tromp* was reported engaged with a cruiser which finally blew up.

Proceeding on their northeast course the destroyers next encountered one or more destroyers to port near Bali and three vessels to starboard. This second phase began at about 0212. The *Pillsbury's* guns scored four direct hits on the vessel to port, which she believes sank. Next our destroyers opened fire on the ships to starboard, which were at a range of 5,000–6,000 yards.

The *Stewart* released five starboard torpedoes, the *Parrott* six, and the *J. D. Edwards* several. Three hits were reported. The Japanese imme-

diately responded and our column was soon exposed to heavy crossfire, which, however, scored no hits, though the accuracy of their fire was mentioned in several reports. Our ships zigzagged radically and opened fire with their guns. Two Japanese ships were seen burning and heavily smoking close to the beach at Nusa Besar. After a few minutes enemy gunfire was shifted to the *Tromp* coming up astern. She was seen firing guns to both sides but her value would probably have been greater had she led the column and thus identified targets for the destroyers. So, likewise, her blued signal was criticized as too bright for its purpose and probably proved of value to the Japanese, for they scored 8 or 10 hits on the Dutch cruiser, damaging her badly.

By 0225 firing ceased, "a clear manifestation of God's grace" as the captain of the *Parrott* termed it, for his ship's steering control had jammed while maneuvering at 28 knots. This had caused her to swing to the left toward the Bali shore. Emergency full speed astern was ordered, and this sudden maneuver threw overboard a Chief Petty Officer. During the engagement he floated around in the water, and the next day reached Bali. Joining up there with some isolated Dutch soldiers he finally succeeded in reaching Java and eventually regained his ship at Soerabaja.

The cessation of firing gave the *Parrott* the opportunity to continue on her course by steering with her engines. All the ships were, therefore, able to return to Soerabaja, except for *Ford* and *Pope,* which had gone to Tjilatjap. The Dutch motor torpedo boats are known to have engaged the enemy in the third wave of the attack but reports of damage inflicted by them are not available.

DISSOLUTION OF THE SUPREME COMMAND

Successful as was our raid in Badoeng Strait, it did not alter the fact that the Japanese were now in Bali as well as in Sumatra. It was generally believed in informed quarters that General Wavell had become convinced of the futility of the further defence of Java, particularly in view of the virtual exhaustion of our fighter planes. On the 23d he received orders from London to leave Java forthwith and to set up his headquarters elsewhere at his discretion. This he did secretly on the 25th, departing with his immediate staff on the British sloop *Kedah,* escorted for a distance by the American destroyer *Pillsbury.* He understood, of course, that the Dutch would continue their resistance, and several thousand

Empire troops were left on the island. But the ABDA Supreme Command had ceased to exist. Dutch officers took over the defense of Java, with the coördinating command nominally resting with the Governor General, Mr. van Mook.

The subsidiary commands also threatened to collapse. It had been evident that the United States Army Air Force Command would not remain longer than the British. General Brereton in fact had left by plane on the 22d. It appeared too that Rear Admiral Palliser would leave with General Wavell, but on the 24th he received orders from London to remain in Java as Commander of the British Naval Forces. He was to withdraw them when in his judgment further resistance would serve no useful purpose, and was to attempt to persuade the Dutch to preserve their naval forces by withdrawing them in time. He was retained as Chief of Staff by Admiral Helfrich.

Admiral Glassford received orders from the Commander in Chief, United States Fleet, to report for duty to Vice Admiral Helfrich. This he did, and the latter expressed his profound gratitude for our "ever loyal" assistance.

SINKING OF THE *LANGLEY* AND *PECOS,* FEBRUARY 27 AND MARCH 1

Desperate as was the situation in Java there was still a bare hope that the island might be held if sufficient fighter planes could be obtained. There was some chance that this might be done. On February 22d, only 2 days after our successful Bali raid, a convoy had sailed from Fremantle, Australia, bound for Ceylon. It was escorted by the United States cruiser *Phoenix,* and in it were the *Langley* with 32 assembled P–40E's on deck and with pilots and flight personnel on board, and the *Seawitch* with 27 crated P–40's in her hold.

Fifty-nine planes were not many to meet a threat of the magnitude of that hanging over Java, especially since half of them would have to be assembled after arriving, but it was a straw at which to clutch. One of Admiral Helfrich's first acts as Chief of the Allied Naval Command in defense of Java was to send orders directly to the *Phoenix* to detach the *Langley* and *Seawitch* from the convoy and divert them to Java.[21] For

[21] Comdr. Robert P. McConnell of the *Langley* says that the orders were received on the evening of the 22d. Admiral Glassford says that it was ordered immediately upon the dissolution of the Wavell Supreme Command.

some reason or other, the *Langley* left the convoy several hours before the *Seawitch.*

There had been considerable correspondence in regard to the *Langley's* sailing. It had been originally intended to load her at Port Darwin, but it was found that the planes could not be taken from the field to the dock there, so that she had to go all the way to Fremantle. It would have been desirable to have brought her into Batavia or Soerabaja, where the planes could easily have been taken to the airfield; but both these ports were now too hazardous, and it was decided to bring her into Tjilatjap. There was no real flying field there, and lighters had to be provided, ramps built for unloading her, and streets cleared to permit passage of the planes. Large numbers of people knew that the work had to be completed by a certain time. The voyage of the *Langley* and the date of her expected arrival were no secrets.

As the *Langley* approached Tjilatjap she was met on the afternoon of the 26th by a Dutch mine layer and two Dutch Catalina flying boats. After some delay and confusion she left the slow Dutch boat and on the morning of the 27th met the American destroyers *Whipple* and *Edsall,* in whose company she proceeded toward Tjilatjap. A large Japanese expedition was approaching the north coast of Java, and it was considered that time was too pressing to permit the *Langley* to wait and approach the coast at night with the *Seawitch.*

It was a fair morning with only a few high, scattered clouds and a light northeast wind. The *Langley* was less than 100 miles south of Tjilatjap when at 0900 an unidentified plane was sighted. Realizing that the enemy had now found the *Langley,* her captain sent a report to Admiral Glassford and requested a fighter escort. There were not 15 fighter planes in all Java, and none could be sent. The *Langley* had only half a flightdeck, too short to launch the fighters she carried. At 1140 the *Edsall* gave the emergency signal "aircraft sighted." The *Langley* was zigzagging on a northerly course as nine twin-engine bombers approached at about 15,000 feet. Probably they came from Bali.

As the planes approached the bomb release point the rudder was put full right and the bombs fell a hundred feet or more off the port bow. "The ship shook violently" and was sprayed with splinters and shrapnel, but sustained no serious damage. On the second run the planes dropped no bombs, perhaps studying the ship's evasion tactics. As they made their third run she made her turn just an instant too soon. The planes

turned too before releasing their bombs. The *Langley* shuddered under the impact of five direct hits and three near hits. One hit was forward, near frame 68. Two hits were on the flight deck near the elevator, a fourth was on the port stack sponson, and a fifth bomb penetrated the flight deck aft, starting stubborn fires. After the bombs landed six Japanese fighters which accompanied the bombers attempted to strafe the ship, but only one made a very determined attack.

Seldom has a ship been hit more severely by one salvo. Aircraft on deck were burning, there were fires below deck, fire mains were broken, the ship was taking water forward and was listing 10° to port. But she could still be steered and her engines were still running in spite of the water rising in the engine room. "The ship was maneuvered to obtain a zero wind" and the fires were somehow put out. The shattered planes on the port side were pushed overboard and counterflooding was carried out in an attempt to correct the list. It was useless; water continued to rise in the engine room and the list was increasing.

As a precautionary measure orders were given to prepare to abandon ship, but they were misunderstood and men began to jump overboard. Some men had been blown off the ship by the explosions and others had been forced to jump to escape the fire, so that the destroyers were busy picking men out of the water. Fortunately the planes made no further attack but withdrew to the eastward after attacking one of the Dutch Catalinas.

At 1332 the order was given to abandon ship. *Edsall* and *Whipple* maneuvered skillfully to pick up survivors with the gratifying result that out of the entire crew there were only six killed and five missing. After checking the disposal of coding apparatus and signal books Captain McConnell left the ship. *Whipple* fired nine 4-inch shells and two torpedoes into her to insure her sinking. The position was about 74 miles south of Tjilatjap.

Whipple and *Edsall* with the survivors cleared the area at high speed, going off to the west.

Our tanker *Pecos* had departed Tjilatjap for Ceylon on the forenoon of February 27th. In the early afternoon she received news of the bombing of the *Langley* and changed course to give the area a wide berth. A little later she received orders to proceed to the lee of Christmas Island to receive survivors of the *Langley* from *Whipple* and *Edsall,* which were badly needed for other duties. Course was changed to

comply, and soon afterwards the destroyer *Parrott,* which had been escorting the *Pecos,* left on another mission.

The *Pecos* arrived at Christmas Island on the forenoon of the 28th. The pilot boat had just come along side with Lt. Comdr. Thomas A. Donovan of the *Langley* to arrange the transfer, when three Japanese twin-engine bombers appeared from the direction of Sumatra. The pilot boat, which had fouled its propeller in a line, was cut loose and left adrift with Lt. Comdr. Donovan aboard, as our ships left at maximum speed. A stick of six bombs fell at the edge of the cover near the docks, but there was no attack on our ships, which headed into a rain squall to the east and escaped.

As a submarine periscope had been sighted at the time of the bombing, it was decided to transfer the survivors at sea. This was done the early morning of March 1st. The destroyers departed and the *Pecos* set course for Fremantle.

About 1000, a single-engine Japanese observation plane with retracted wheels appeared from the northeast. The *Pecos* opened fire on it, but after circling out of range it withdrew. It was only too clear that our men could look forward to an attack by carrier-based planes. They were not disappointed. An hour and 45 minutes later dive bombers appeared and began an attack which lasted 3 hours and finally sent the *Pecos* under.

The attack came in three main waves about an hour apart. The first wave consisted of six planes, each of which made two runs, dropping one bomb each time. The first three bombs missed, but one of the next three hit, killing many of the crew of a 3-inch antiaircraft gun. Before these planes left a very near hit amidships to port gave the ship an 8° list to that side.

In the second wave there were also six planes. They scored four hits and a damaging near hit. One of the hits blew out the side of the ship for almost 20 feet, mostly above the waterline, and started a fire. The second carried away part of the foremast and radio antenna and destroyed the center line bulkhead, increasing the list to 15°. Another of these hits forced the cutting out of two boilers and reduced her speed.

Between attacks our men did what they could to put out the fires and to correct the list. Thanks to the fact that Comdr. Elmer P. Abernethy had previously taken the precaution of blowing the oil vapor out of his tanks with steam, the fires were not serious, but the cumulative damage

of the repeated attacks made it more and more doubtful that the ship could be saved. Sometime the rumor started among the passengers aft that the order to abandon ship had been given. No officer had issued or passed such an order, but two boats and several life rafts were put over and several men jumped overboard before the error was corrected.

The third wave of nine planes came. It scored no direct hits, but two near misses were damaging. "Finally a bomb exploded near the ship forward on the port side and the ship slowly settled forward and finally plunged bow first into the sea, leaving the stern poised in the air for an instant before finally sinking." [22] This was at 1548.

At 1530, a few minutes before she sank, the order had been given to abandon ship, and men went overboard with anything that would float. Additional Japanese planes appeared and strafed the men in the water, but a man on the .50-caliber machine gun aft, still at his post, shot fabric from the tail of one of the planes.

When it had become apparent that the *Pecos* was going to sink a distress signal was sent out. The radio had been jarred off frequency, but the operator on the *Whipple* was tuning and picked up the call. The destroyer immediately set course for the scene and arrived about 2000. Having prepared cargo nets and life lines en route, she slowed down as she approached the mass of floating wreckage and men. She picked 220 survivors from the water.

Some of the survivors had seen the conning tower of a submarine sometime after sunset, so that when the *Whipple* picked up the sound of submarine propellors about 2130 she dropped depth charges and cleared the area at once.

Casualties were high. Survivors of the *Langley* as well as men from the *Pecos* had not hesitated to man guns as their crews fell. It was estimated that about 50 men were killed and 150 injured directly as a result of the action. There were only 220 survivors from both vessels, 149 from the *Langley,* 71 from the *Pecos.* The former had sailed with about 430 men, while the latter left Tjilatjap with 242.

The *Seawitch* had better luck. She arrived at Tjilatjap without incident on the forenoon of February 28th. But it was too late. On the preceding afternoon and night a major engagement had been fought in the Java Sea in an unsuccessful attempt to prevent an enemy landing. The

[22] From report of Comdr. Elmer P. Abernethy, captain of the *Pecos.*

Japanese did land on March 1st, and there was no time to assemble the crated planes. It was reported that they were destroyed in their crates to prevent their falling into enemy hands when Tjilatjap was abandoned.

THE BATTLE OF THE JAVA SEA,[23] FEBRUARY 27

As the battered *Langley* was disappearing beneath the water, the fate of Java was approaching its decision. The Japanese were already on Bali and it was probably from its airfield that the planes came to sink our aircraft tender with her precious load of planes.

The Japanese had lost no time in reinforcing their troops on the island. On February 24th it was learned that an enemy convoy had sailed from Makassar, evidently bound for Bali, where it could be expected to arrive on the 25th. Our striking force was not at the moment in a position to intercept these ships, so that the task fell to our submarines. On the night of the 24th *Salmon* reported the convoy heading westward near the Paternoster Islands and also reported gunfire off the northeast coast of Soembawa. We had no surface forces in the vicinity, so that the occasion for the firing remains a mystery. On the night of the 25th *Seawolf* saw a landing on the southeast coast of Bali and made a dawn attack. The British *Truant* also reported the enemy landing but apparently did not attack. *Spearfish* attacked two cruisers near Debril Rock and was very severely depth charged in return. The Japanese were now well established in Bali with only a narrow channel between them and Java and with an airfield within easy flying distance of Soerabaja.

The chief threat to Java, however, was developing in the northeast. A large expedition was being prepared in both Makassar Straits and in the Molucca Sea for a descent upon the northeast coast of Java. Simultaneously a second expedition was assembling near Banka for a landing on northwest Java, probably near Priok.

This was the situation when General Wavell left Java and Admiral Helfrich took upon his shoulders the naval defense of the remnants of the Dutch Empire.

Admiral Helfrich set about his desperate task with energy and courage. He had already ordered the *Langley* and *Seawitch* with their cargoes of fighter planes to be diverted from their Ceylon-bound convoy to Java. He ordered the few mines that the Dutch had left to be laid along the north coast, centering on Rembang. (It was possibly this hastily laid

[23] Also called the Battle of Bawean Islands and Action off Soerabaja.

field that cost us the British destroyer *Jupiter* on the night of the 27th–28th.) All available submarines were ordered into the Java Sea and were drawn into close-in defensive positions. The Dutch *O–19, K–8, K–10,* the United States *S–37* and *S–38,* and the British *Truant* were able to arrive at once. The *S–37* was assigned patrol between the western entrance to Soerabaja and Bawean. *Truant* was assigned a patrol northwest of Soerabaja, near the 112th meridian, *K–10* was sent north of Madoera, and the remaining submarines were stationed as follows:

O–19 latitude 06°13′ S., longitude 112°00′ E.
S–38 latitude 06°20′ S., longitude 112°41′ E.
K–8 latitude 06°14′ S., longitude 113°08′ E.

American experience since the invasion of the Philippines had indicated the difficulty of attacking the Japanese close-in, and the move further had the effect of depriving us of scouting information from our submarines. It seemed unlikely that our undersea craft could seriously impede the Japanese.

A western striking force had been formed at Priok, chiefly of British ships withdrawn from convoy duty. Five of these were ordered to Soerabaja to reinforce Admiral Doorman's eastern striking force, but the rest were retained in the west to meet the enemy force gathering at Banka. These were the British light cruisers *Dragon* and *Danae,* the Australian *Hobart* and the British destroyers *Tenedos* and *Scout.*

On the 26th an RAF plane on reconnaissance reported a fleet of 20 transports protected by cruisers and destroyers near the east coast of Sumatra, about 100 miles north of Batavia. That night (February 26th–27th) our western striking force made a sweep near Banka Strait without making any contact, and returned to Priok on the 27th. That port had for some time been subjected to daily bombings, the fuel situation was acute, and the British were anxious to withdraw their ships. Admiral Helfrich at first intended to send these vessels to Tjilatjap, but consented to their sailing for Ceylon on the 27th.[24] Unless their presence could have turned the scales, it is perhaps fortunate that they were not present to be caught in the final holocaust.

[24] According to Admiral Helfrich's and Admiral Glassford's reports. A British report says that this western striking force left Tandjong Priok on the night of 27th–28th to intercept an enemy force north of Batavia, which was reported to consist of four cruisers, three destroyers and three merchantmen. After failing to find the enemy the British ships returned to Priok, went on to Padang to pick up refugees, and sailed on the afternoon of the 28th for Ceylon. They arrived safely at Trincomalee. These dates are surely mistaken, as the ships were not at Priok on the 28th.

It was the attempt to stop the Japanese expedition coming in from the northeast that led to the Battle of the Java Sea.

Our striking force in the east was based on Soerabaja, where its position was highly precarious. The port was subjected to daily bombings, so that our ships had to keep to sea during the day, and, since a night landing was to be expected, they had to be active through the night. Thus our men entered the battle, when it came, without proper rest after days of work and tension. Neither could our ships fuel properly in Soerabaja, for the fuel lines to the docks had been ruptured by bombs.

These were not the only difficulties faced by Admiral Doorman's striking force. It was composed of ships of four nations which had had little opportunity of joint training or of working out common tactical doctrines. There was no opportunity to promulgate a well-considered plan of battle. Communication was inadequate and broke down completely during the battle. It was carried on by flashing light in plain English or by Dutch high-frequency radio to the *Houston,* which relayed to our destroyers. Lieut. Otto Kolb, communication officer for Commander Destroyer Squadron 29, was on board the *De Ruyter* and his work made this system possible. "There were no common flag signals or signal books available, nor were there any tactical plans save of a most rudimentary nature." [25]

On February 25th word was received from General MacArthur that on the 20th nearly 100 Japanese ships had assembled at Jolo. The same day (25th) a reconnaissance plane reported about 80 ships (evidently the same force) on a southerly course in the Strait of Makassar. Unfortunately the reporting plane was attacked and shot down before it could transmit further details.

On the 25th it was learned also that a small force of the enemy had landed on the Bawean Islands, less than 100 miles north of the entrance to Soerabaja. The *S-38* was ordered to bombard the position and did so effectively, firing her entire supply of 4-inch ammunition, with the radio station as her primary target. The night of the 25th Admiral Doorman with the Dutch ships, the *Houston,* and five American destroyers, made a sweep east along the north coast of Madoera in the hope of intercepting the transports reported near the Bawean Islands. No contact was made and he returned to port the following morning.

[25] From report of Comdr. Henry E. Eccles, C. O., *J. D. Edward*

The main enemy force was definitely located on the 26th. Apparently it had come through Makassar Strait and was on a southwesterly course near the Arends Islands (off the southeast coast of Borneo).[26] The southwesterly course suggested that the landing might be attempted west of Toeban, rather than on Madoera as the Dutch had anticipated. This would avoid our submarine concentration northeast of Madoera, so that a few were shifted in order to keep a strong force between the Bawean and Karimoen Djawa Islands. As a further precaution three Dutch motor torpedo boats were stationed off Toeban and three off Madoera. It was this approach of the enemy convoy which led to the decision to bring the *Langley* into Tjilatjap by daylight in spite of the risk involved.

Admiral Doorman was informed that at 1155 (Java Time, Zone −7½) an enemy force consisting of 30 transports protected by 2 cruisers and 4 destroyers was at position 04°50′ S., 114°20′ E., course 240° T., speed 10 knots. "He was directed to proceed to sea, attack after dark, then retire toward Tandjong Priok." [27] Subsequently to these instructions was added: "You must continue attacks until the enemy is destroyed." [27]

The British vessels from Priok arrived at Soerabaja on the 26th, so that Admiral Doorman's striking force now consisted of the Dutch light cruisers *De Ruyter* (his flag) and *Java,* the American heavy cruiser *Houston,* the British heavy *Exeter* and the Australian light *Perth.* These were supported by the Dutch destroyers *Kortenaer* and *Witte de With,*[28] the British *Jupiter, Electra* and *Encounter,* and five American destroyers, *J. D. Edwards, Alden, Ford, Pope* and *Paul Jones.*

The *Houston's* after turret was still out of commission as a result of the bomb hit early in the month. She had been on convoy duty but had been sent from Darwin to Java just in time to escape the bombing of the Australian port in which the *Peary* was lost. She arrived at Tjilatjap on the 21st and sailed the next day via Soenda Strait with *Paul Jones* and *Alden.* The three ships joined Doorman at Soerabaja on the 24th.

Five destroyers were all that we could contribute to the striking force. The *Peary* had been sunk at Darwin. The *Stewart,* after being hit in the Bali raid, had been put into drydock at Soerabaja. Due to improper

[26] According to Admiral Glassford's report it now consisted of about 24 transports with a heavy escort. For contact reports before and during the Battle of Java Sea see chart opposite p. 43, and appendix II.

[27] From Admiral Glassford's report.

[28] The Dutch *Banckert* had been damaged during a Japanese bombing of Soerabaja. It was further damaged in a subsequent raid and was ultimately lost.

blocking she rolled over and damaged both herself and the dock. Japanese bombs inflicted further damage, so that she was ultimately lost. *Barker* and *Bulmer,* shaken up in the Gaspar Strait bombing, were en route to Australia with the *Black Hawk*. *Whipple,* which rescued survivors of the *Langley* and *Pecos,* had been damaged in a collision with the *De Ruyter,* which left her unfit for heavy duty. The *Edsall* had dropped a depth charge at too slow a speed and was leaking badly as a result. *Pillsbury* and *Parrott* after participating in the Bali raid had been withdrawn from the striking force in urgent need of overhaul. Thus 8 of our original 13 destroyers could not be with the striking force.

Ford and *Pope,* arriving at Tjilatjap after the Bali raid, were sent to sea to meet the *Black Hawk* and receive 17 torpedoes—all that remained for our destroyers. They arrived in Soerabaja on the 24th and distributed their torpedoes in time for the Java Sea Battle. However, *Pope* was leaking badly in the hot-well, and the necessity for welding this prevented her taking part in the engagement on the 27th.

After receiving news of the position of the enemy convoy on the 26th Admiral Doorman held a conference in the afternoon at which it was decided to make another sweep to the eastward north of Madoera Island and then to proceed toward Batavia. "In case of contact British and Dutch destroyers were to attack at once and retire, then cruisers attack and retire, then United States destroyers come in and deliver a torpedo attack." Retirement was to be toward Priok.

The reason for this sweep to the eastward is not entirely clear. Perhaps Admiral Doorman expected that the Japanese would attempt a landing that night along the north coast of Madoera or Java. Probably he feared that if he turned north to search for and attack the convoy directly he might miss it altogether and arrive too late at the scene of the landing. As it turned out, the transports milled around near the Bawean Islands for 2 days before attempting to come in. The Japanese had previously employed similar tactics with success at other points in their advance into the Indies.

After requesting to be informed promptly of any reconnaissance reports which might come into Bandoeng, Admiral Doorman led our striking force out of Soerabaja on the evening of the 26th. His exit was somewhat delayed by the *De Ruyter's* colliding with and sinking a tug and a water barge. Some time after 1900 he received a report that a Dutch

flying boat on reconnaissance near the Bawean Islands had been fired upon by two Japanese cruiser planes.

A much more significant item of information did not reach Admiral Doorman until very much later. At 1830 that evening, about the time that our striking force was coming out of the Westervaarwater, two United States Army bombers attacked the Japanese convoy northeast of Bawean Islands. Their report of its position was not received by the Commandant of the Soerabaja Naval District till 2200, after which it was relayed to Admiral Doorman.[29] By the time he received this information Admiral Doorman must have been approaching Sapoedi Strait, which he had set as the eastern limit to his sweep. Upon reaching it at 0130 on the 27th, he turned westward.

By morning of the 27th our force was not far outside Soerabaja. At 0858 single planes flying high and fast dropped three bombs near *Jupiter*. A little later the *Houston* opened fire on a plane. No more bombs were dropped, but it appeared that the enemy was following our movements closely. Upon Admiral Doorman's reporting this incident the High Command ordered, "Notwithstanding the air attack you are to proceed eastward to search for and attack the enemy." To this Admiral Doorman replied, "Was proceeding eastwards after search from Sapoedi to Rembang. Success of action depends absolutely on getting good reconnaissance information in time, which last night failed me. Destroyers will have to refuel tomorrow."

During the forenoon our ships swept west almost to Mandalika. At 1240 Admiral Doorman reported, "Personnel have this forenoon reached the point of exhaustion." In the early afternoon our ships retired to Soerabaja to lie behind the mine fields. Our destroyers needed fuel, our men rest, and Admiral Doorman more recent information as to the position of the enemy. Only this last need was filled.

"By 5 p. m. local time on the 27th the enemy forces had been developed with reasonable accuracy," says Admiral Glassford. "It was known that a convoy of 39 to 45 transports, escorted by 2 or 3 cruisers and 8 to 12 destroyers, was in a position approximately 20 miles *west* of Bawean Island, 60 miles north of the west entrance to Soerabaja. It was

[29] The convoy was reported at lat. 05°30′ S., long. 113°00′ E., as of 1830. At 0255 Admiral Doorman received an amplified report describing the convoy as consisting of 18 or more ships, one of which was possibly an aircraft carrier or battleship.

established furthermore that a strong *covering* force was then 35 to 40 miles southwest of Bawean. This force was partially developed by the British *Exeter, Jupiter,* and *Electra,* now joining Doorman from the West Java Sea.

"The *Exeter* reported 1 enemy cruiser and 4 destroyers in this locality, and later 3 cruisers and 4 destroyers. The *Electra* reported 2 battleships (really heavy cruisers), 1 cruiser, and 6 destroyers; and later 1 cruiser and a large number of individual ships. The *Jupiter* made one report of scattered forces consisting of 4 cruisers and 14 destroyers.

"Thus the two groups of the enemy, namely the convoy plus escort and the covering force to the southward of the convoy, were fairly well known and developed by early evening of the 27th."

Upon receipt of this additional information[30] about 1500 Admiral Doorman turned in the channel of the mine field which our ships were just entering and signalled: "Am proceeding to intercept enemy unit. Follow me. Details later." So our striking force sortied for its last, fateful battle.

It is difficult to describe this battle accurately, for there are gaps in our information which cannot now be filled. Most of the vessels engaged did not survive to make a detailed report. Our knowledge of the engagement comes largely from the American destroyers, which alone of all the Allied ships engaged escaped afterwards. While their reports are excellent, they did not at all times have a complete view of the battle. Being out of communication with Admiral Doorman, our destroyer commanders had no means of knowing upon what information he was acting or what his intentions were. Finally, our destroyers were not present after 2100 and our information for this portion of the battle is derived chiefly from Dutch sources.[31]

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[30] Specifically, the reports were:

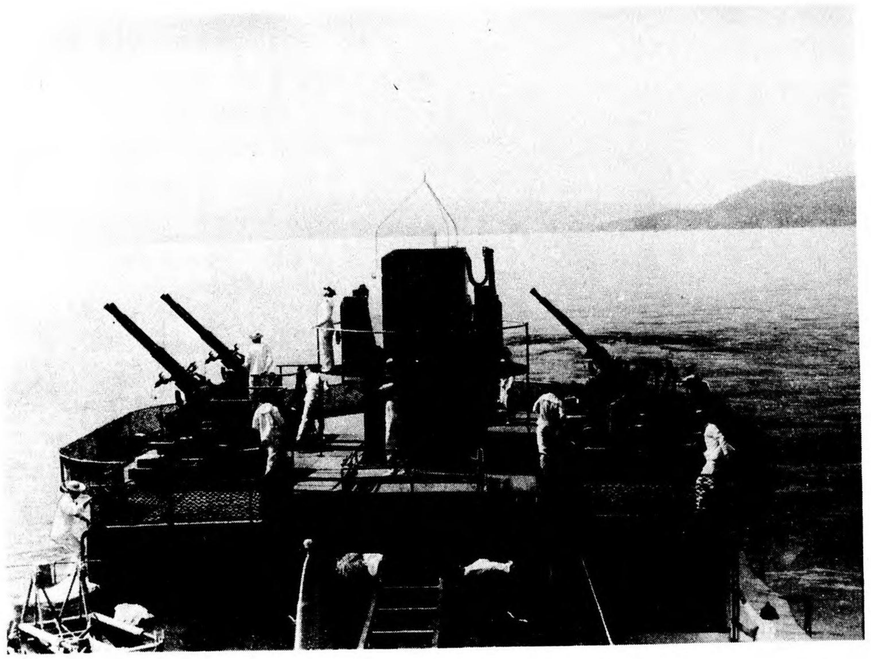
At 1340: Twenty ships, unknown number of destroyers. Position, lat. 04°45′ S., long. 112°15′ E., course 180° (approximately north of Bawean Island).

At 1345: One cruiser, lat. 04°04′ S., long. 111°07′ E., course 220° (far northwest of Bawean, nearer south coast of Borneo).

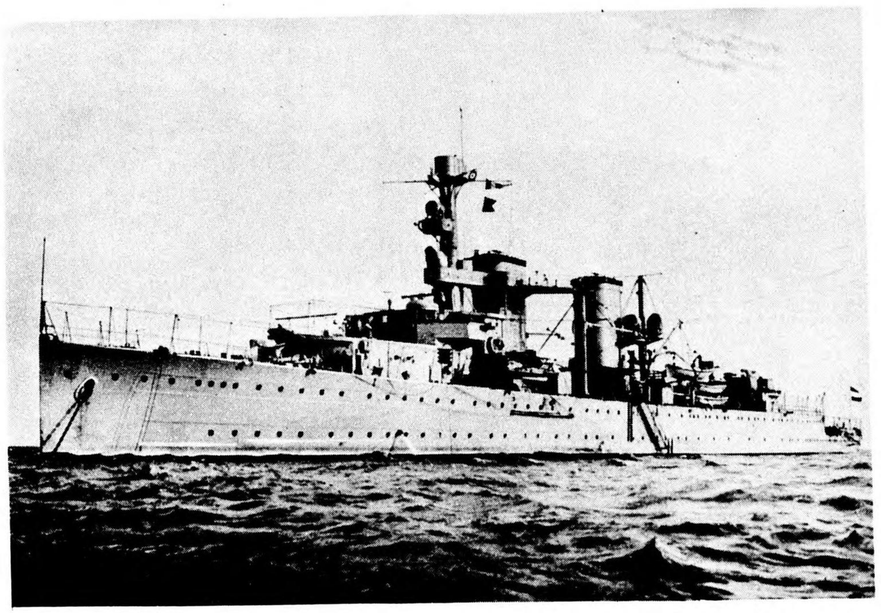
At 1350: A great fleet with 2 cruisers, 6 destroyers, 25 transports; position 20 miles west of Bawean, course south. One cruiser and 4 destroyers proceeding south full speed, transports behind.

See chart opposite p. 43, and appendix II.

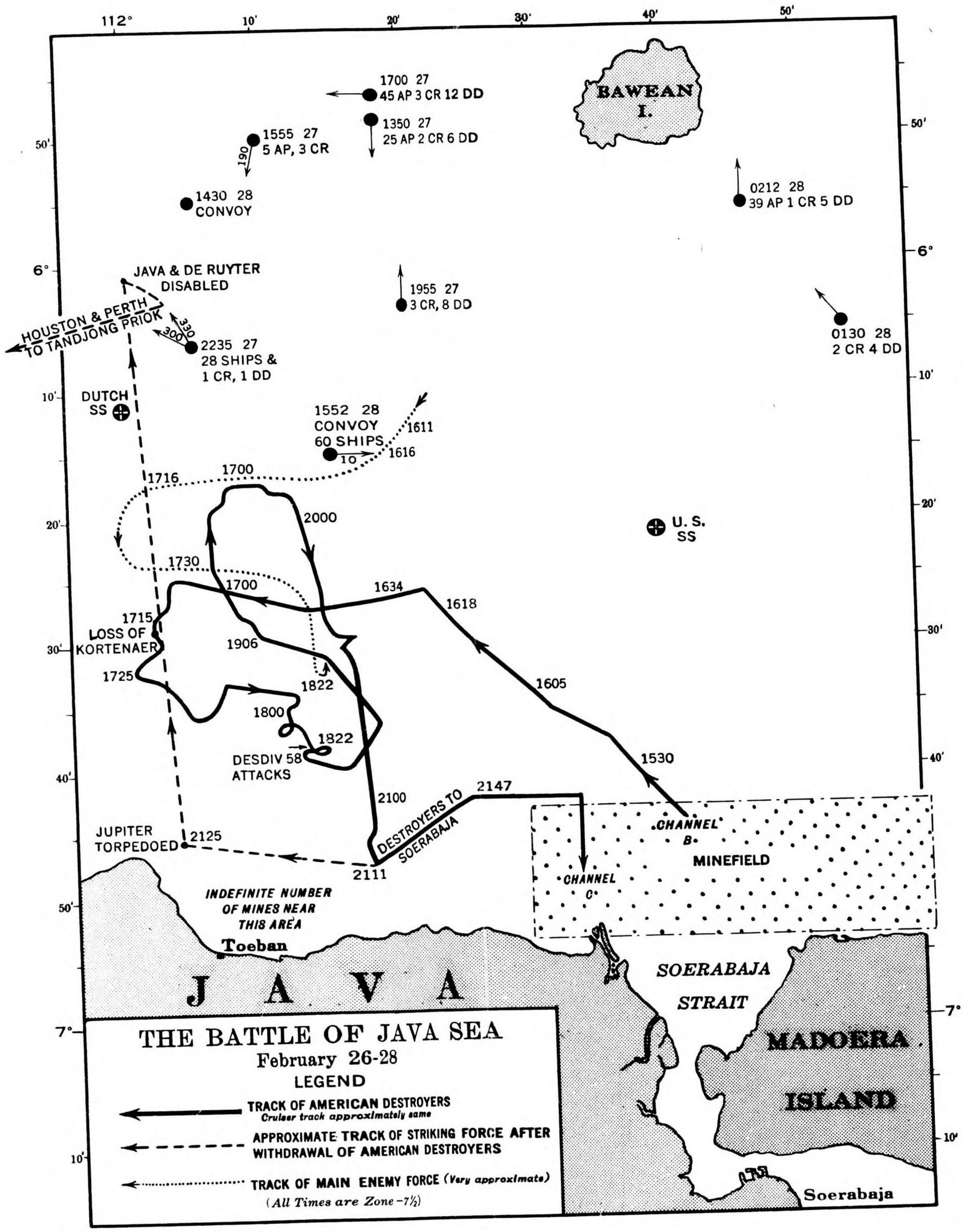
[31] These have been made available through the courtesy of the Netherlands Naval Representatives to the Combined Chiefs of Staff.

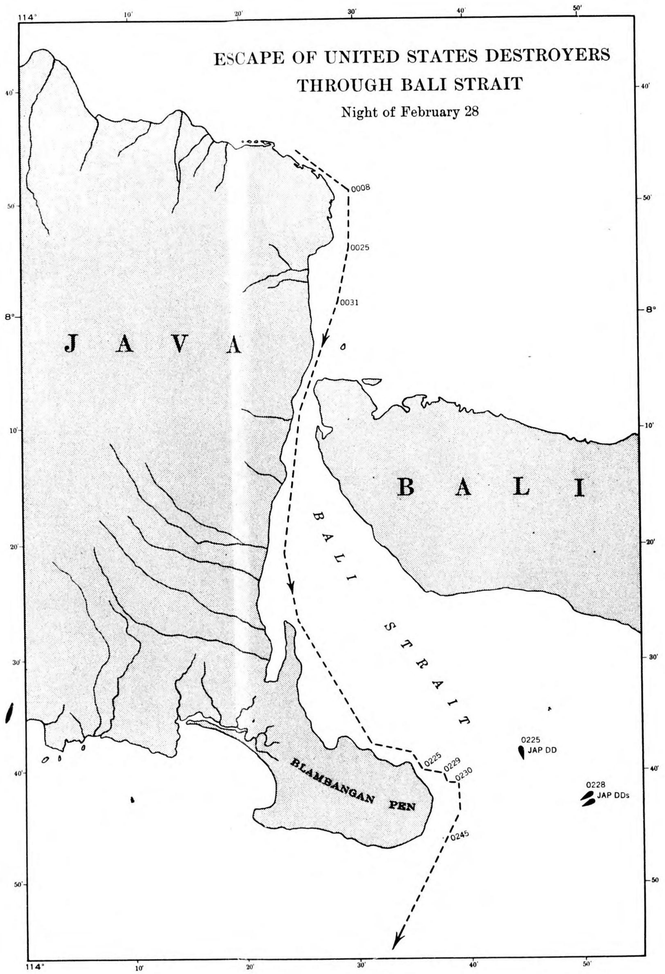


Antiaircraft battery of the *De Ruyter*.

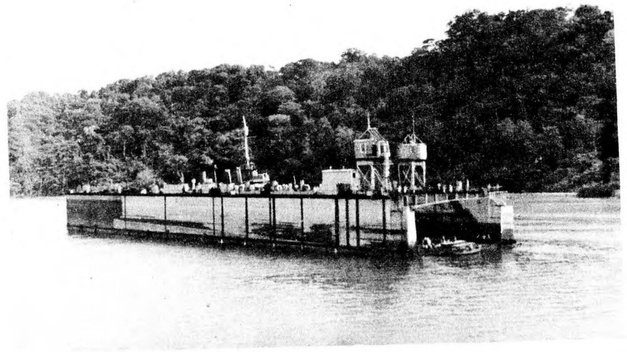


The Dutch light cruiser *Java*.


THE BATTLE OF JAVA SEA
February 26-28
LEGEND
TRACK OF AMERICAN DESTROYERS
Cruiser track approximately same
APPROXIMATE TRACK OF STRIKING FORCE AFTER WITHDRAWAL OF AMERICAN DESTROYERS
TRACK OF MAIN ENEMY FORCE (Very approximate)
(All Times are Zone -7½)
BAWEAN I.
1700 27
45 AP 3 CR 12 DD
1350 27
25 AP 2 CR 6 DD
1555 27
5 AP, 3 CR
190
1430 28
CONVOY
0212 28
39 AP 1 CR 5 DD
JAVA & DE RUYTER
DISABLED
HOUSTON & PERTH
TO TANDJONG PRIOK
330
300
1955 27
3 CR, 8 DD
0130 28
2 CR 4 DD
2235 27
28 SHIPS &
1 CR, 1 DD
DUTCH
SS
1552 28
CONVOY
60 SHIPS
10
1611
1616
1716
1700
2000
U. S.
SS
1730
1700
1634
1618
1715
LOSS OF
KORTENAER
1906
1725
1822
1605
1800
1822
DESDIV 58
ATTACKS
1530
2100
2147
DESTROYERS TO
SOERABAJA
JUPITER
TORPEDOED
2125
2111
CHANNEL
B
MINEFIELD
CHANNEL
C
INDEFINITE NUMBER
OF MINES NEAR
THIS AREA
Toeban
J A V A
SOERABAJA
STRAIT
MADOERA
ISLAND
Soerabaja
112°
10'
20'
30'
40'
50'
6°
7°



The destroyer *Witte de With*. All Dutch destroyers in the Netherlands East Indies were of this type.



Floating dock at Tjilatjap, showing *Whipple* docked for repairs after collision. The *Marblehead* received temporary repairs in this dock.

Contact with the enemy.

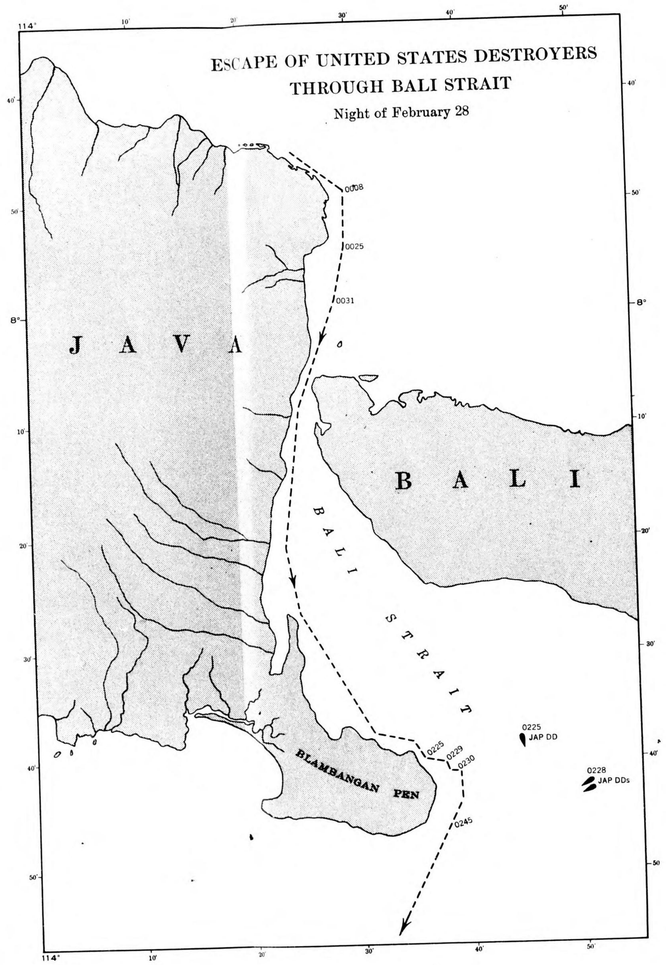
Our striking force stood out of Soerabaja on a northwest course in a sea made choppy by a 15-knot wind from the east. Visibility was unlimited until evening. The enemy was on the watch and his planes picked up our force at once. At 1530 *Houston* opened fire at planes nearly overhead, and our ships scattered. There was some overcast, so that the planes were not seen, but a minute later several heavy bombs fell 5,000 yards astern. Admiral Doorman requested fighter protection but it could not be spared. The Commander of Air Defense at Soerabaja required his eight remaining Brewster Buffaloes to escort the four dive bombers which were shortly to make an attack. The enemy made no further attack and our column reformed on course 320°, speed 18 knots.

Our cruisers were in column formation with *De Ruyter* in the lead, followed by *Exeter, Houston, Perth,* and *Java* in that order. *Electra* was ahead of the column, with *Jupiter* to the starboard and *Encounter* to port of the *De Ruyter*. The four American destroyers were in column astern, with the two Dutch destroyers about 4,000 yards to port of *Edwards*. The Dutch destroyers were endeavoring to work up to the van of the formation, where they belonged, but boiler trouble limited *Kortenaer* to about 24 knots and they were having little success. The American destroyers were laboring under contradictory orders. Their assigned position was on the disengaged bow of the cruisers, but at the same time they were under orders not to pass ahead of the Dutch destroyers. As a matter of fact, the Americans too had little speed to spare; with their old machinery, leaky condensers and fouled bottoms they had all they could do to keep up with the cruisers through the ensuing engagement.

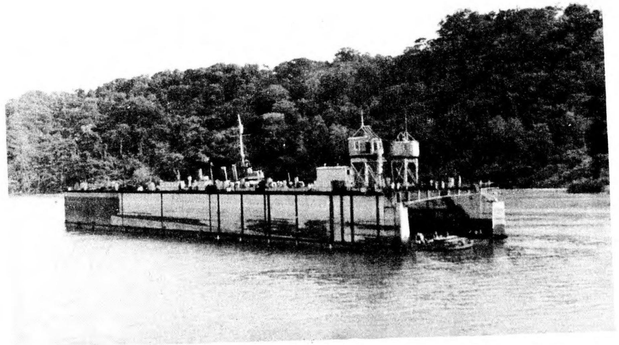
At about 1600 the British destroyers sent contact reports, one of which mentioned two battleships. At 1611 our American destroyers sighted the enemy ships bearing between 315° and 340°, which put them only a few points on our starboard bow.[32] Our ships went to general quarters and increased speed to 24 knots. Evidently we had run into the enemy's covering force, which was known to lie between us and the convoy.

The composition of the enemy force was not determined with complete accuracy. The battle opened "at extreme range of visibility," and later

[32] Accounts vary as to the exact position of the enemy ships when first sighted. Comdr. Thomas H. Binford, commanding DesDiv 58, on the *Edwards*, says 340° T. Comdr. Henry E. Eccles of the *Edwards* says 315°, while the *Edwards* log says 320°. Lt. Comdr. John J. Hourihan of the *Paul Jones*, which was at the rear, says 295°. But it seems clear they were on our starboard bow.



The destroyer *Witte de With*. All Dutch destroyers in the Netherlands East Indies were of this type.



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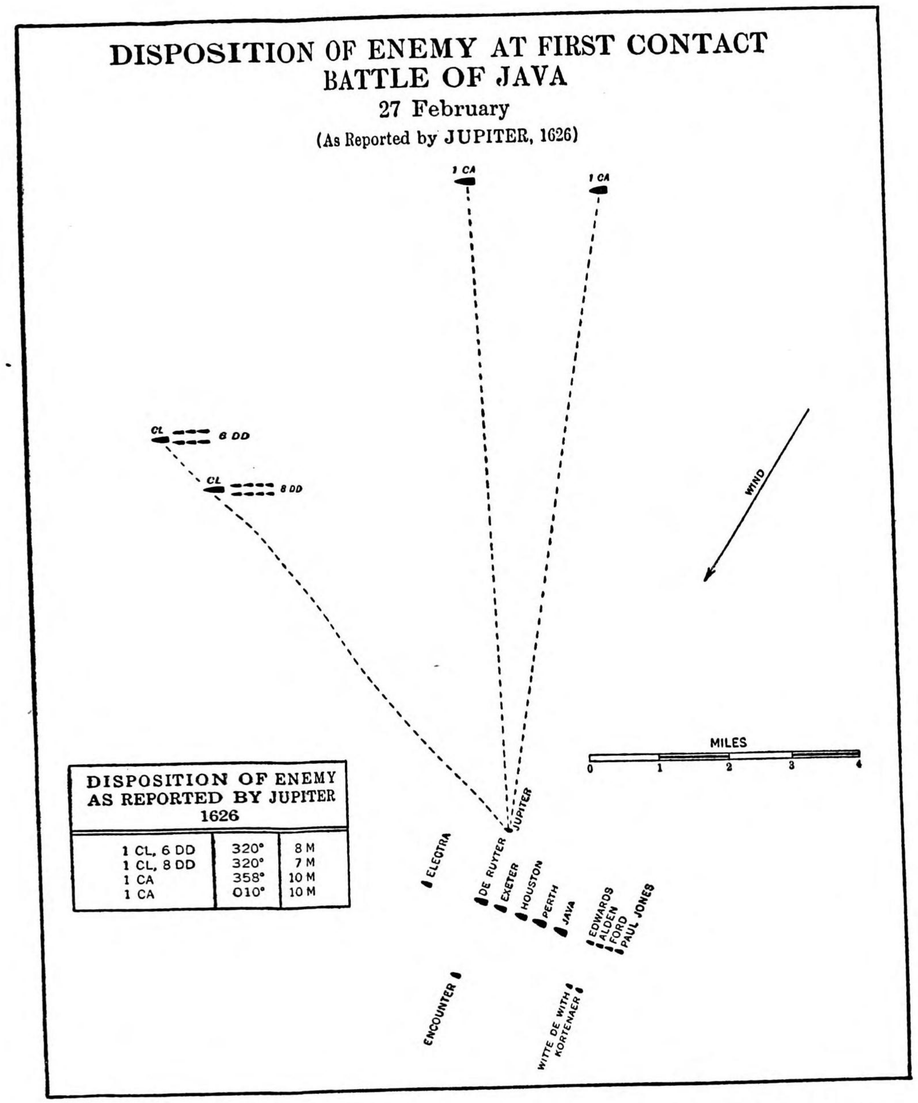


smoke obscured the view, but it appears that we had to deal with from 4 to 7 cruisers and 2 heavier ships described as battleships of either the *Kongo* or *Ise* class. Possibly these latter were in fact heavy cruisers.[33] The other cruisers are variously described: There were 2 or 3 heavy cruisers of the *Nati* class, or possibly of the *Atago* class, which is quite

[33] Perhaps of the *Mogami* class, which has subsequently been discovered to be exceptionally large. Eight-inch shells were the largest definitely seen, and Admiral Glassford remarks that these ships were really heavy cruisers.

similar. Most accounts agree that there were also present 2 or 3 light cruisers of the *Sendai* class. Lt. Comdr. Lewis E. Coley of the *Alden* says that *Nati* class cruisers led the enemy line while some of the *Kako* class brought up the rear, and remarks that "the latter must have suffered heavy damage." These were accompanied by 13 destroyers in 2 flotillas of either 7 and 6 or 8 and 5 ships respectively.[34] When first sighted these enemy cruisers were to the northwest of our force, while the 2 heavy ships were considerably farther east. The latter gradually came in and closed the range all through the battle.

The enemy opened fire at 1616. Our cruisers changed course to about 290° and replied a minute or two later, the *Houston* or *Exeter* first, followed shortly by the *De Ruyter* and *Perth*.[35] On the Dutch destroyers it was thought that the *Java* too opened fire at this time. As the range was approximately 30,000 yards it seems doubtful that the 5.9 and 6-inch guns of the light cruisers were effective in the early stages of the action. As enemy shells began to come near our ships, *Jupiter* and *Electra*, which had come under fire from a *Sendai* class cruiser, left their exposed position for the disengaged side of our cruisers. The former took a station abeam the main body, or about 800 yards on the port bow of the *Edwards*.

The two cruiser columns[36] moved on roughly parallel courses in a westerly or northwesterly direction with the Japanese vessels somewhat ahead of our own. From time to time our cruisers turned either toward

[34] Comdr. Eccles of the *Edwards*: "Contact reports indicated a force of cruisers and destroyers and 1 battleship reported by a plane." Log of the *Edwards*: "Enemy main body appeared from fore top of consist of 2 battleships and 7 cruisers, but were not clearly visible from bridge. This was confirmed by contact reports from plane and *Exeter*." Lt. Comdr. Cooper of the *Ford*: "The Japanese force appeared to consist of 2 battleships, either of the *Kongo* or *Ise* class, 7 cruisers, 3 of which were of the *Atago* class, and a number of destroyers." Lt. Comdr. Parker: "Very little could be seen of the enemy forces, but they appeared to be in at least 2 groups, fairly widely separated. The eastern group was reported by the foretop spotter of the *Ford* to be composed of 2 battleships." *Perth* reported 2 cruisers of the *Nati* class preceded by 2 *Sendai* cruisers, with 13 destroyers in 2 groups. This is confirmed by a survivor of the *Jupiter*, who adds that the destroyers were divided into 2 flotillas of 6 and 7 ships respectively. A second *Jupiter* survivor reported 2 battleships, 4 or 7 cruisers and several destroyers. Another British report mentions 3 *Sendai* and 2 *Nati* cruisers, and 13 destroyers divided 8 and 5. A Boeing plane reported 5 cruisers and 12 destroyers. Admiral Helfrich says that "it may safely be inferred that our striking force was opposed by at least 2 heavy cruisers, 3 light cruisers and 13 destroyers."

[35] According to the log of the *Edwards*, transports could be seen from time to time beyond the enemy cruisers, and our shells fell among them The Japanese started laying smoke to protect them and opened fire only "after an appreciable delay." No other account mentions the transports, although it is agreed that the Japanese laid smoke.

[36] The enemy cruisers may not have been in column. There is some evidence that they were grouped according to class See the diagram p. 58, based on *Jupiter's* contact report.

525837°—43——5

or away from the enemy, but it appears that in general the range diminished. Japanese fire was good, and they had the advantage of a seaplane overhead to spot for them.[37] Six- and eight-inch splashes appeared around our cruisers. In this early stage the *De Ruyter* and *Houston* appeared to be bearing the brunt of the battle. At 1622 the first enemy salvo landed about 1,000 yards over the *De Ruyter*. At 1629 a salvo straddled that ship as did a second salvo a minute later. In another minute she appeared to be hit, though not seriously.[38] The splashes around the *Houston* appeared to be from 6-inch shells, although the two hits she received during the battle were 8-inch. Shells were soon falling within a few yards of the *Exeter*. Lt. Comdr. Jacob E. Cooper of the *Ford* remarks that about every fourth Japanese salvo was a straddle. The spread of the salvos was very small.[39] Our ships escaped serious damage only because, owing to the great range, the shells came down almost perpendicularly.

Meanwhile our American destroyers had worked up to a position about 3,000 yards on the disengaged quarter of the *Java*. In order to avoid being pocketed along the Java shore they stayed as close to the cruiser column as they dared. They kept the splashes of the overs fired at the *Java* and *Houston* about 1,000 yards on the starboard bow of the *Edwards*, leading our destroyer column, but occasional ricochet shells came close. Several large splashes were seen on the port bow of the *Edwards*, "apparently from single gun salvos of a battleship."

Good as was the Japanese fire, our own cruisers were doing better. Admiral Helfrich remarks that the *Houston* was firing five or six salvos a minute, while the *De Ruyter* was also maintaining a high rate of fire. In the early stages of the battle most of our shells were falling around two enemy cruisers, but one of our 6-inch cruisers was sending up splashes around an enemy destroyer. There does not appear to have been any plan of fire distribution, but since the enemy ships were somewhat ahead of ours and our heavy cruisers were near the middle of our column it seems that they were probably firing on the rear of the Japanese column. "At 1634 enemy gunfire appeared to decrease considerably,

[37] Admiral Helfrich says that the enemy used R. D. F. to get the range more accurately.

[38] The shell passed through her armor and through two decks before exploding. It started a fire which was quickly extinguished. Casualties were one dead and six wounded.

[39] The log of the *Edwards* notes that both 6- and 8-inch salvos had a pattern of about 1,200 yards.

and at 1635, plainly visible from *Alden's* bridge an explosion took place on the rear enemy cruiser (*Kako* class) and a column of smoke about 300 feet high rose into the air."[40] Lt. Comdr. Cooper of the *Ford* says that "during this time two columns of smoke were observed which appeared to be hits on the enemy by our main body."[41]

It was perhaps to cover their crippled cruisers and force us to open the range that the Japanese made a destroyer torpedo attack at 1634. Apparently it came from the direction of the enemy cruiser column now about 28,000 yards distant, bearing 325° T. But there is another possibility. While our cruisers were engaged in their gun-duel, eight destroyers were observed laying a smoke screen across the horizon bearing about 295°. As our ships were then on course 290° this meant that the enemy destroyers were almost ahead of us some 24,000 yards distant.[42] This destroyer attack was repulsed by gunfire, *Perth* hitting and possibly sinking an enemy destroyer.[43] This circumstance seems to indicate that the attack must have come from the vicinity of the enemy cruisers, for *Perth*, near the rear of our column, could scarcely have hit a destroyer 24,000 yards ahead. Also, it appears that the Japanese purpose was to protect their cruisers by driving us to greater range, and to accomplish this the attack must have come from the north.

Retreat to the South: "Exeter" damaged, "Kortenaer" sunk.

Apparently the battle continued for several minutes with the cruisers in parallel columns. At approximately 1645 Allied planes from Java attacked the enemy. The planes themselves could not be seen, but the geysers sent up by their bombs could be distinguished from the splashes of the shells from our cruisers.[44] Sometime between 1645 and 1655 the

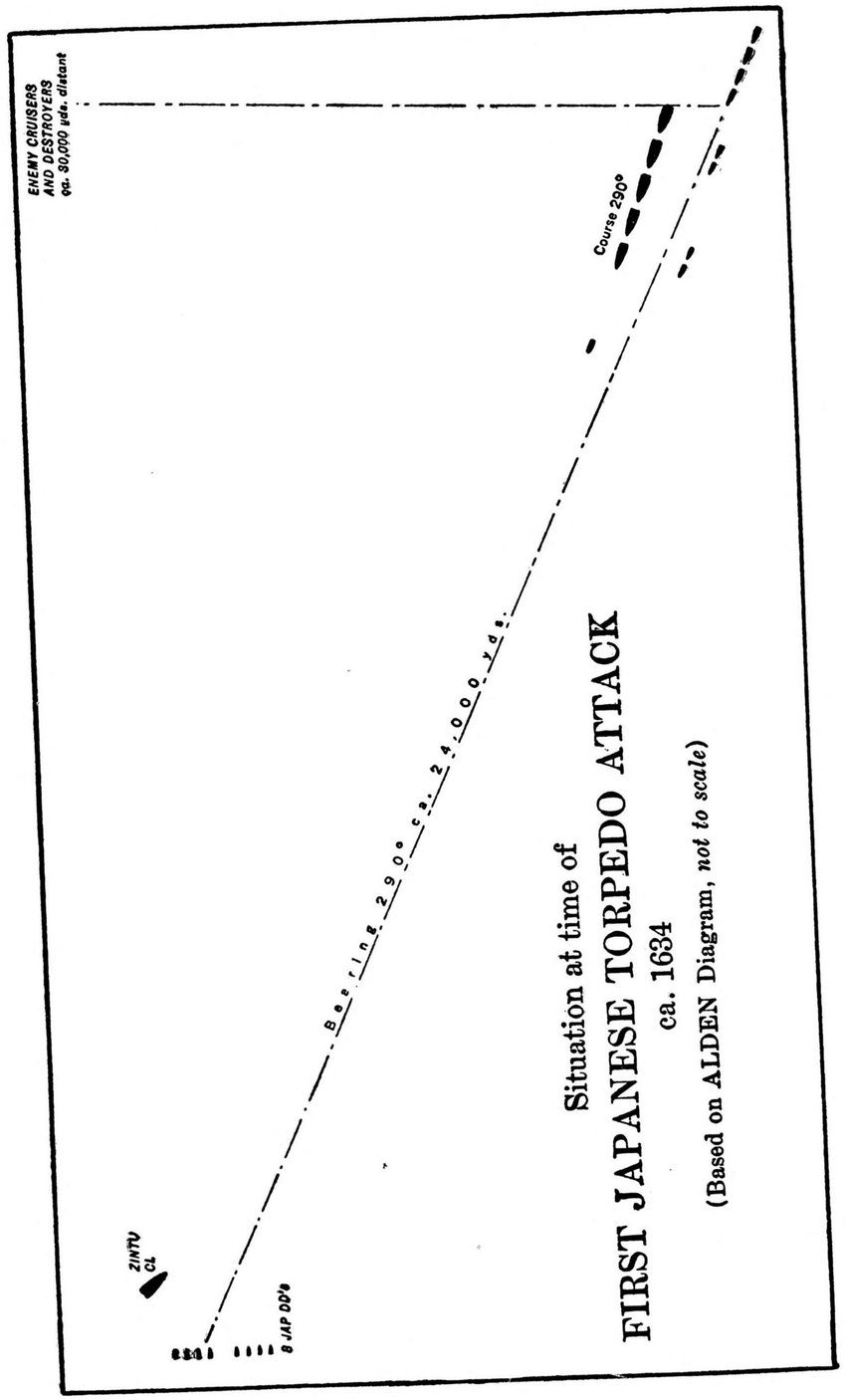
[40] From the report of Lt. Comdr. Coley of the *Alden*. The *Perth* reported that in this phase of the battle we scored heavily on a *Nati* cruiser.

[41] Admiral Glassford's "appreciation" of the battle indicates that the two enemy heavy cruisers turned out of column after being hit. There is nothing in the reports from our destroyers to indicate this. Rather one gathers from them that the enemy cruisers remained in column.

[42] Comdr. Coley of the *Alden* says that the eight destroyers were of the *Sigure* class, with a *Zintu* class light cruiser as a destroyer leader. A diagram shows the cruiser somewhat to the north of the destroyers.

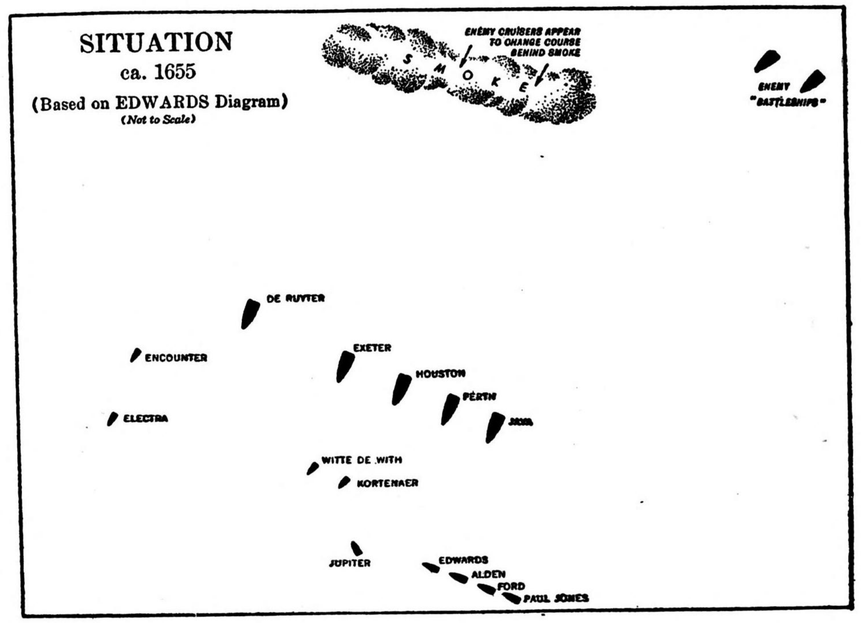
[43] Admiral Helfrich says that *Kortenaer* made three hits on an enemy destroyer and that the British destroyer assisted in repelling this attack. Admiral Glassford's account says: "*Jupiter* and *Electra* advance from cruiser van to repel this attack and are promptly sunk by concentrated gunfire." This is surely a mistake. It was a later attack which the two British destroyers met, and the *Jupiter* was certainly not sunk in doing it.

[44] Apparently not from the decks of our destroyers, however, as their reports do not mention this air attack, which is described in Dutch sources.



Situation at time of
FIRST JAPANESE TORPEDO ATTACK
ca. 1634
(Based on ALDEN Diagram, *not to scale*)

Java was hit, and immediately afterwards our cruisers turned by simultaneous movements to the left. This falling away to the southwest may have been to open the range, as one-gun salvos from the "battleships" continued to fall close astern of the *Java,* but it seems more likely that our ships turned to avoid torpedoes launched on their starboard bow.[45]



During the next half hour numerous torpedoes were seen. Some were undoubtedly launched by the enemy cruisers or destroyers, but it seems clear that we had come upon an enemy submarine group, too. At 1650 *Jupiter* turned sharply to starboard across the bow of *Edwards,* signalling "torpedo," and a few minutes later a torpedo passed astern of *Edwards,* between her and *Ford.* (At this time our destroyers were still in column on a west-northwest course, while our cruisers were coming toward them on a southwesterly course. See diagram.) About 1658 torpedoes and a periscope were reported on the *Edwards'* port quarter. Two minutes

[45] Lt. Comdr. Cooper of the *Ford:* "At 1655 the *Java* appeared to be hit. . . . . Just after the *Java* was hit torpedoes were fired on the starboard of the main body; all ships turned left to avoid being hit. At 1706 we again paralleled the enemy and action was resumed." Lt. Comdr. Edward N. Parker, commanding DesDiv 59: "At about 1655 it is believed that torpedoes were fired by the Japanese destroyers on the starboard bow of our cruiser formation." Probably these were fired at long range, perhaps by the cruisers, for it was 15 minutes later that the enemy destroyers pressed their attack.

later a "huge geyser of water resembling a torpedo explosion" shot up in the same vicinity. With it went debris and "two large pieces of metal observed falling end over end."[46] There were no surface ships near the spot, so that it appeared that the enemy had hit one of his own submarines.[47]

After holding a southwesterly course for only a few minutes our cruisers again (at 1706) reformed their column on a course of about 290° and renewed the action. Almost at once one of our cruisers scored a hit on the stern of the foremost Japanese cruiser.[48] It was perhaps about this time that the *Houston* received an 8-inch hit in the engine room and slowed for a moment. However, the shell did not explode and she was soon able to resume speed.

At about 1710 3 additional enemy cruisers and several destroyers were seen over the horizon on our starboard bow. At about the same time the two enemy destroyer flotillas of the force with which we were already engaged made an attack.[49] While our cruisers were maneuvering to avoid their torpedoes the *Exeter* was hit in a boiler room by an 8-inch shell. It killed 14 men and cut out 6 of her 8 boilers, reducing her speed first to about 20, then to about 15 knots. At about the same time—it is not clear whether it was just before or after the *Exeter* was hit—our cruisers turned by individual movements to the south.[50] As our ships

[46] From the log of the *Edwards*.

[47] This may have been merely a torpedo exploding at the end of its run.

[48] The time is given as 1702, but it seems more likely to have occurred after this renewal of the action.

[49] Admiral Helfrich says that about 1700 the *De Ruyter* turned sharply to starboard, evidently to close the range between the two fleets and thinks that the Japanese destroyers' attack was made at this time. None of our destroyer accounts mentions this incident, but a survivor of the *Jupiter* says that the *De Ruyter* turned 180° (apparently to go south), indicating that she had been headed north, toward the enemy. According to Admiral Helfrich's version, it was while our cruisers were maneuvering to avoid the torpedoes fired by the Japanese destroyers that the *Exeter* was hit and turned out of line.

[50] According to Admiral Glassford's account, when the *Exeter* was hit she turned out of column. The other cruisers followed her movement, thus breaking off the engagement. An account by a survivor of the *Jupiter* is similar: ". . . the enemy did not register any success until 1715 when the *Exeter* was hit in a boiler room and had to haul out of the line to port. The *De Ruyter* altered course 180° without signal and the remainder of the cruisers followed her round." The accounts from our destroyers are somewhat different. Lt. Comdr. Cooper says: "At 1708 heavy smoke was seen coming from the stacks of the *Exeter* and she was noticed to slow down, the three cruisers astern overtaking and passing her." The other accounts make no mention of this, but give the impression that she turned into line on a southward course with the other cruisers (as the diagrams accompanying the *Edwards'* report indicate) and did not noticeably lose speed until several minutes later. Our ships may have turned out of column south not because of the hit on the *Exeter* but to avoid the torpedoes. *Edwards* log: "1711 hard left rudder to dodge torpedo

turned south the *De Ruyter* lagged behind to close the enemy, whose cruisers had turned behind a smoke screen and were moving toward us behind their attacking destroyers. Our cruisers opened a concentrated fire and the destroyers were driven back, but not before the *De Ruyter* had sunk one of them.

From the *Ford,* now on a southerly course,[51] a torpedo was seen on the port quarter, overtaking and converging on the destroyer at about a 20° angle. Skillful maneuvering avoided the danger. At about the same time *Edwards* put her rudder hard left to avoid a torpedo ahead, and several torpedoes surfaced in the vicinity of our destroyers. The *Kortenaer,* which was about 700 yards to starboard of the *Edwards,* was caught in the starboard quarter at 1713 by a torpedo which came from behind.[52] There was a "heavy, whitish explosion flinging debris 100 feet in the air. She heeled way over and yawed 90° to the right. She poised momentarily and then turned turtle and folded up like a jackknife so that bow and stern came together. The stern end sank at once and the bow within 50 seconds of the original explosion. Men were blown high in the air and several jumped into the water or scrambled up her side as she heeled over. No survivors could be seen in the water."[53]

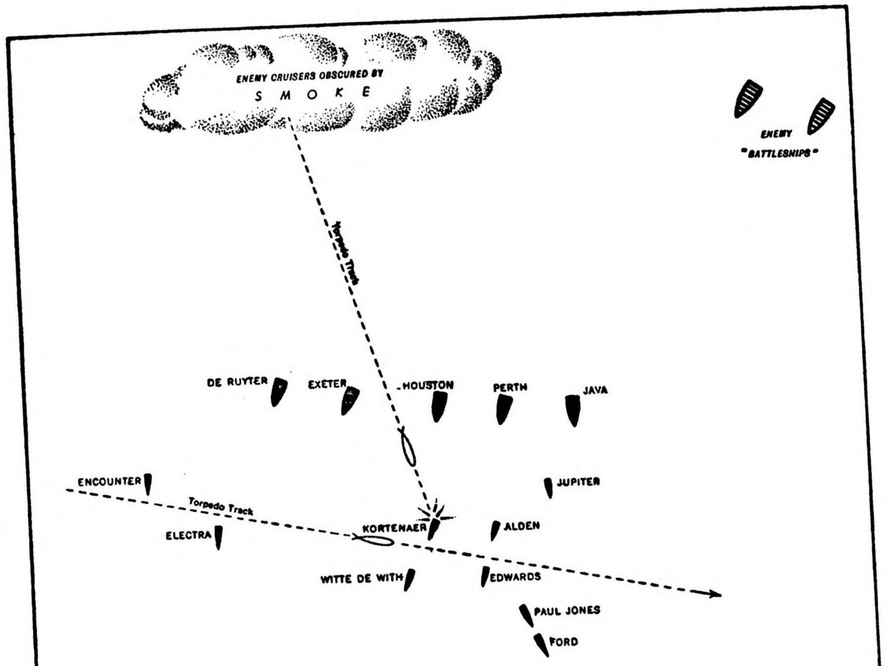
The torpedo which sank the *Kortenaer,* like the one dodged by *Ford,* came from the north, that is, from the direction of the enemy battle line. But others, like the one avoided by the *Edwards,* came from the west. The danger continued for several minutes. At 1721 a submarine was sighted to port of the *Edwards* and shortly afterward a torpedo was seen coming from the same direction.

ahead. Cruiser had executed ships left 90° dodging torpedoes and *Exeter* slowed and was making white smoke, later resuming a speed of about 20 knots and laying a heavy smoke screen." (Comdr. Eccles of the *Edwards* remarks on the "gallant conduct" of the *Exeter* "after receiving severe damage in holding her course at best speed across the track of enemy torpedoes so as to lay a smoke screen to cover the other cruisers.") Lt. Comdr. Coley: "At 1708 Allied cruisers turned by ship movements to south, whether to open the range or to escape torpedo fire could only be guessed." A British account: "At 1707 Japanese destroyers made a second attack, but were forced to keep their distance by the gun-fire of our ships. While evading action was being taken the *Exeter* was hit by an 8-inch shell in a boiler room, which reduced her speed to 16 knots and forced her out of the battle line." On two of our destroyers the damage to the *Exeter* was not noticed until after the *Kortenaer* blew up, when all our ships were headed southward.

[51] At 1710 our destroyers turned by column movement to 160°, and at 1712 to 220°.

[52] Survivors thought that their ship had been torpedoed by a submarine, as the Japanese destroyers were at rather long range at the time, but it is entirely possible that the torpedo was fired by a destroyer. The position was lat. 06°25′ S., long. 112°08′ E.

[53] From the log of the *Edwards,* kept by Lt. William J. Giles, Jr. Later in Soerabaja it was learned that *Encounter* picked up 113 survivors that night when our ships again passed through the area.

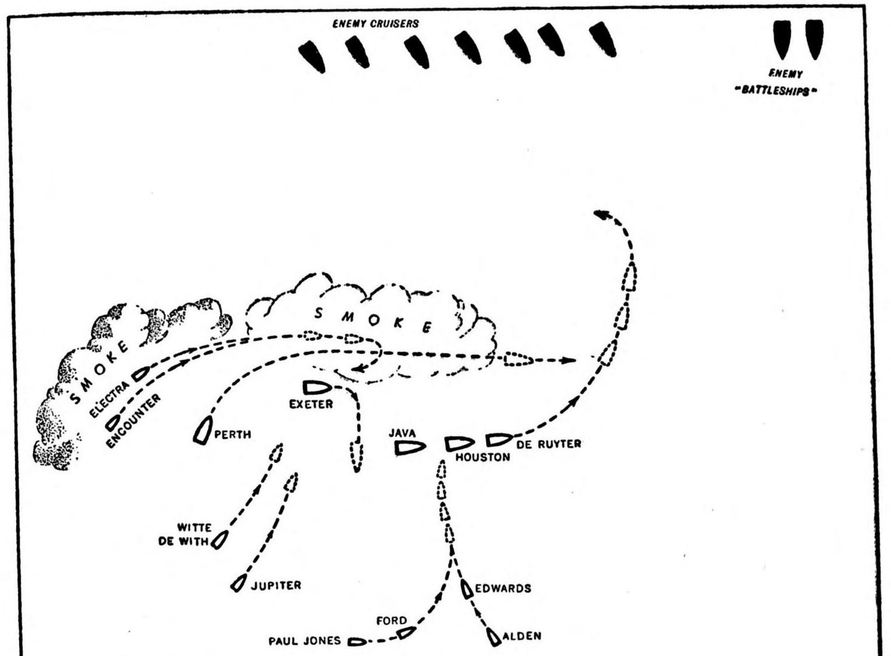


LOSS OF THE KORTENAER
ca. 1713
(Based on EDWARDS Diagram, *not to scale*)

It was apparently after the sinking of the *Kortenaer* that the *Exeter* slowed seriously and our formation fell into confusion. The enemy closed in from the north to take advantage of the situation. Commander Eccles of the *Edwards* remarks, "It appeared that the striking force had suffered heavy damage and that the enemy was pushing home an attack to drive us east." A diagram accompanying the *Alden* report tends to confirm this, but one accompanying the *Edwards* report shows the enemy cruisers and "battleships" working around to the east of our force. Since their convoy lay to the northeast, this would have been a logical maneuver. Moreover, the coast of Java, to which we were quite close at this time, runs northwest in this region, so that by driving us west the Japanese might have pocketed our force along the shore.

Our column reforms.

But our confusion did not last long. While our destroyers laid smoke to cover our cruisers Admiral Doorman reformed his column. At 1726

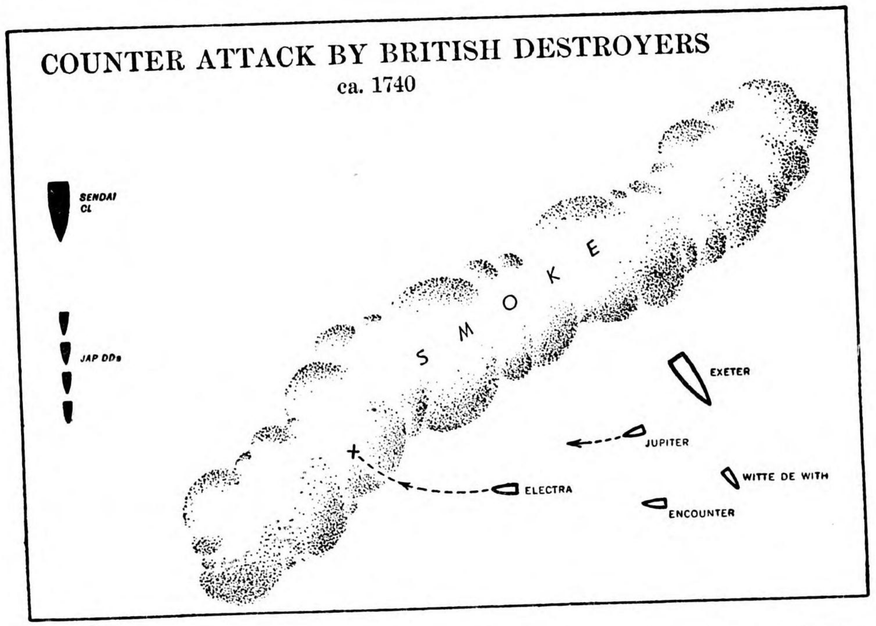


OUR COLUMN REFORMS
ca. 1730
EXETER WITHDRAWS
(Based on EDWARDS Diagram, *not to scale*)

he signaled for all ships to follow the *De Ruyter,* and the other cruisers, minus the *Exeter,* fell in behind him. *Perth,* followed by *Electra* and *Encounter,* delayed only long enough to dash between the *Exeter* and the advancing enemy line to cover the crippled cruiser with smoke, after which she fell in behind the others.[54] The *Exeter* started to withdraw slowly to the south. At this point there was another heavy explosion 2,000 yards on the *Edwards'* starboard bow. Several torpedo tracks were seen from *Witte de With,* and a torpedo exploded to starboard, then another to port, as they finished their runs. The Dutch destroyer dropped several depth charges, indicating that submarines were in the vicinity.

[54] Comdr. Eccles of the *Edwards* speaks of the "gallant and conspicuous manner in which H. M. A. S. *Perth,* as soon as possible reversed her course and covered the crippled *Exeter,* by covering her by smoke from a distance of about 800 yards on the engaged side, exposing herself to concentrated enemy fire, then enabling *Exeter* to withdraw."

The enemy, however, was pressing his advantage and was sending in his destroyers to finish off the *Exeter*. Only the British destroyers were in a position to intercept them. About 1730 the *De Ruyter* signaled "Counterattack." *Electra* hoisted "TOR 1" and entered the smoke to attack. As she swung to starboard she met three enemy destroyers coming toward her through the smoke. All four destroyers opened fire. *Electra* scored four hits on one of the Japanese ships, but was herself badly hit in return. One shell entered her boiler room, while another demolished her steering engine. She stopped and lay helpless. The destroyer she had hit turned away and broke off the engagement, but the remaining two poured shell after shell into the British destroyer, coming so close that even their machine guns could be used. Many survivors of the *Electra* were wounded in the water.[55]



Jupiter followed *Electra* into the smoke. By the time she reached the spot where her sister ship had last been seen, the *Electra* had disappeared

[55] The other ships of our striking force merely saw the *Electra* disappear into the smoke, after which she was "never seen again." This description is from a Dutch source, based on accounts of survivors of the *Electra*, 58 of whom, including 5 badly wounded, were picked up the following morning by the United States submarine *S-38*. They were transferred to a Dutch mine layer off Soerabaja. While they were floating on their rafts, during the night of the 27th, these survivors saw a submarine, probably Japanese, pass on the surface.

and *Jupiter* found only two enemy destroyers, now apparently starting an attack on the *Exeter*. *Jupiter* opened fire and the two Japanese ships turned away and disappeared in the smoke and the failing light.

The *Exeter*, which had had her guns trained to port on the approaching *Nati* cruisers, now turned them to starboard and opened fire on the *Sendai* class cruiser which was supporting the destroyer attack. The Japanese ship promptly turned away and disappeared in the smoke.

Witte de With, which was ordered by Admiral Doorman to escort the *Exeter* to Soerabaja, now saw on her starboard quarter a Japanese destroyer engaging one of the British and opened fire. The Japanese ship shifted her fire from the British to the Dutch destroyer. In the brief exchange which followed, *Witte* scored two hits before her opponent turned away. *Witte* was not hit, but she suffered extensive damage when one of her own depth charges fell overboard and exploded close astern.

The American destroyers apparently did not participate in this counterattack. At 1728 they had started laying a smoke screen to protect the other cruisers and probably were not in a position to meet this attack which seems to have been aimed at the *Exeter*.[56]

Admiral Doorman meanwhile had gathered his cruisers into column on a southeasterly course, then turned north toward the enemy to renew the engagement. Probably his object was to draw the Japanese away from the *Exeter*. As he was making this turn (about 1745), our cruisers opened fire with their antiaircraft batteries and a stick of bombs fell 1,000 yards to port of our destroyers. Five minutes later two more sticks fell near our ships without doing any damage. Furthermore, splashes from enemy 6-inch shells were drawing close and were straddling just astern of the *Edwards*. Torpedo tracks were seen now and again.

But our cruisers had emerged from the smoke and were again slinging shells at the enemy at a range of about 18,000 yards. "Their fire was particularly effective, as fire was seen on one of the enemy battleships and two fires noted on one of the enemy cruisers. These did not appear to have been brought under control as long as we could see them." [57]

The *De Ruyter's* short-wave radio had been damaged and hand signal lamps were the only means by which Admiral Doorman could com-

[56] This is confirmed by the statement of a survivor of the *Jupiter* that Admiral Doorman's signal was "British destroyers attack." A Dutch account gives the same version of the signal.

[57] From the report of Lt. Comdr. Cooper of the *Ford*. It seems that *Perth* deserves credit for one of these hits. She is said to have smothered one of the enemy cruisers with two salvos directly on the target.

municate with his force. On board the *Houston,* too, the T. B. S.,[58] upon which our destroyers relied for communication, had cut out. As one of our destroyer commanders remarks, henceforward "the crystal ball was our only method of anticipating the intention of Commander Combined Striking Force."

At 1806 a signal came by flashing light from the *De Ruyter:* "Counter-attack." Our destroyers were preparing to carry out this order when Admiral Doorman signaled, "Cancel counterattack."[59] and then "Make smoke." Our destroyers again laid smoke to cover the retirement of the *Exeter* and perhaps to cover our cruiser column. While they were thus engaged Admiral Doorman signaled, "Cover my retirement."

The reason for this order, when our cruisers were more than holding their own, is not entirely clear, but it appears that Admiral Doorman was anxious to break off the engagement in order to go after his real objective, the enemy transports.[60] It was now growing dark and visibility had decreased to about 15 miles, so that he might be able to slip into the convoy under cover of darkness.

When they received this order the four American destroyers were between our cruiser line and the enemy. To Comdr. Binford a torpedo attack seemed the most effective means of covering our retirement. Breaking out of the smoke they had just laid, our destroyers saw the Japanese battle line some 22,000 yards distant on the starboard bow.[61] They closed the range to 14,000 or 15,000 yards before firing their starboard torpedo broadside at 1822. The enemy cruisers attempted to stop them by gunfire, but their shells were falling about 800 yards short. As these first torpedoes hit the water there was a large explosion on "the right hand" enemy ship, apparently the result of our cruisers' gunfire. Our destroyers then turned by a column movement and fired their port torpedoes at 1827. Lt. Comdr. Coley of the *Alden* remarks that at this

[58] Short-wave voice radio.

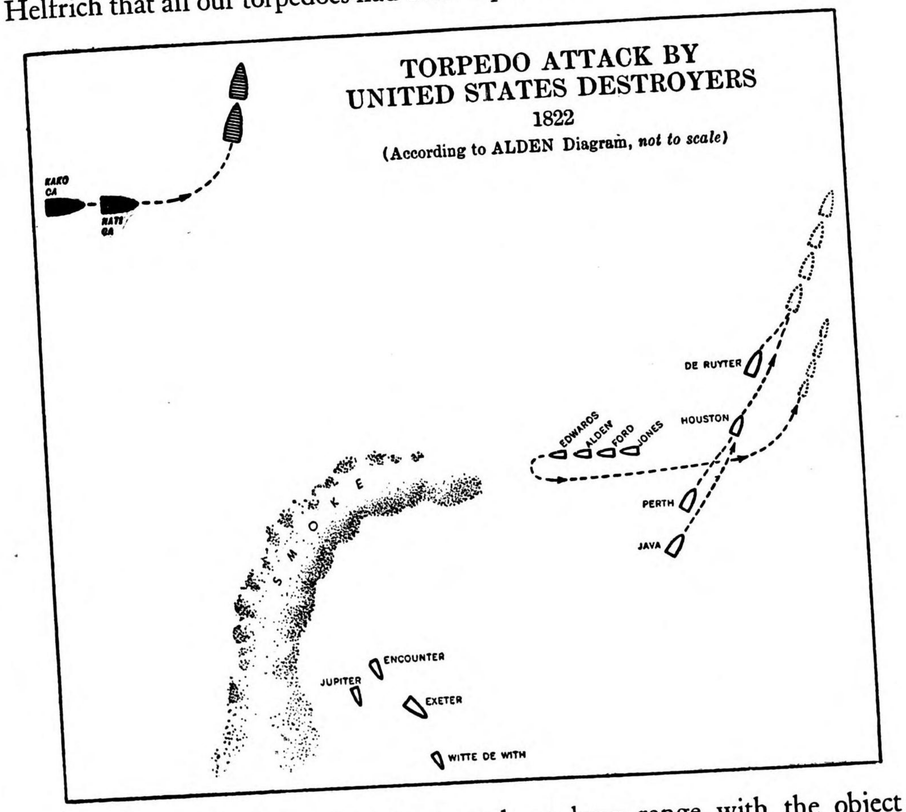
[59] It appears that the occasion for these orders was still another Japanese destroyer attack, which was promptly turned back by gunfire from our cruisers.

[60] At 1805 Admiral Helfrich sent Admiral Doorman a report that, at 1757, 35 ships, including 1 cruiser and 4 destroyers (evidently the main convoy) were on course 170° at lat. 05°10′ S., long. 111°35′ E. This position is northwest of the Bawean Islands. The report added that, at 1630, 5 large ships and several small ones were at lat. 06°20′ S., long. 115°30′ E., on course 315°. This latter group had been attacked by bombers, which hit and stopped a cruiser. It is doubtful if Admiral Doorman received this, for not long afterwards he asked the position of the enemy convoy.

[61] Probably our destroyers were on a westerly or northerly course at this time.

time "the rear ship of the enemy column appeared to be on fire aft, and to have a fire in her high forward turret or superstructure."[62]

At 1831 there was a signal from the *De Ruyter,* "Follow me." Our destroyers turned under cover of smoke, crossed under the stern of our cruiser column and took a position on their disengaged quarter on a course between east and northeast. Comdr. Binford reported to Admiral Helfrich that all our torpedoes had been expended.



This torpedo attack had been made at long range with the object of forcing the enemy to turn back. In this it was successful, for "immediately after our torpedo attack the two Japanese heavy cruisers turned by column movement to the north."[63] Lt. Comdr. Coley remarks, "It is

[62] For the disposition of our ships during this attack, see Appendix I, page 85. An American plane which saw this portion of the battle reported that one of the burning 8-inch enemy cruisers succeeded in controlling its fires and resumed its place in line. The same plane also reported that three enemy destroyers were on fire and were left behind.

[63] Report of Lt. Comdr. Coley of the *Alden.* A British account (apparently based on *Perth's* report) says: "At 1812 the enemy cruisers turned away under cover of a smoke screen, and when

definitely considered that the *Exeter* was saved by this attack." It was too much to hope for a hit at the distance at which our torpedoes were fired, and yet about 1830, approximately 10 minutes after our starboard broadside, a large explosion was seen in the Japanese battle line and it seemed very probable that a torpedo had found its mark.

Thrust to the north.

Within a few minutes the opening range and poor visibility forced an end to our cruiser gun action as we moved off on a northeasterly course. Our destroyers trailed. "Darkness set in and we followed the main body endeavoring to regain station, and having not the slightest idea as to his [Doorman's] plans and still only a vague idea to what the enemy was doing." [64]

The withdrawal of the enemy was at once reported to Admiral Helfrich by Admiral Doorman, who at the same time asked for further information as to the location of the enemy transports. This request indicates that he had not received the 1805 report. It is possible that it was again sent to him in reply, for he changed course to lead his ships to the northwest toward this last reported position of the convoy. But the men in our destroyers could only guess his intention. "There were no more signals and no one could tell what the next move would be. Attempts were made to communicate again with *Houston* and *De Ruyter* with no results." [65]

If Admiral Doorman hoped to avoid the enemy cruisers in this thrust at the transports he was disappointed. Japanese planes followed our course with flares, thus eliminating any chance of a surprise attack, and we made intermittent contacts with enemy warships during the entire run. At 1902, while our force was on a course of 290°, enemy ships, perhaps the ones with which we had just broken off our engagement, were observed on bearing 240°.[66] Our striking force changed course to the north. At 1912 the Japanese were reported bearing 212° T. from us and gunfire was seen again.

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last seen the rear cruiser had been hit and was burning fiercely. The *De Ruyter* led round to the northeast and gave chase, but failed to gain touch with the enemy in the failing light." This was certainly later than 1812, for it was after and a result of our torpedo attack. Also it seems doubtful that Admiral Doorman was trying to regain contact with the enemy warships.

[64] Commander Eccles' report.

[65] Commander Binford's report.

[66] Lt. Comdr. Cooper of the *Ford* says that our cruisers opened fire briefly. No other report mentions our firing at this time.

Our ships pulled away and again lost contact with the enemy for several minutes, but about 1930 planes dropped eight green parachute flares over our column, apparently to mark its position for their cruisers. Four ships now appeared on our port bow, bearing about 300° T. It seems scarcely possible that this was the same group encountered a few minutes earlier. It may be that our previous contacts had been with a covering force while this last was possibly with a screening force close to the convoy. The *De Ruyter* signaled, "Target to port." Our cruisers sent over a few star shells and opened fire. The engagement was brisk but lasted only a few minutes. Admiral Doorman's objective was the convoy and he was probably not anxious to reengage enemy warships. When flashes in the enemy's direction indicated that the Japanese were firing torpedoes our column turned away to the east, and soon afterward a succession of small changes of course brought us again toward the south.

Why Admiral Doorman so easily abandoned this attempt to reach the convoy is not clear. To the men on our destroyers, struggling at full speed to keep their position, it appeared that he was retiring to Soerabaja. Actually his intention, as it subsequently appeared, was either to sweep westward along the north coast of Java to intercept an enemy landing, or to attempt to get around the enemy covering force to the southward.

About the time our striking force turned back to the south, Rear Admiral Pieter Koenraad, Commandant of the Soerabaja Naval District, received a report from a United States Army bomber which had attacked the convoy that evening at 1700. At that time there were 45 transports, 3 cruisers, and 12 destroyers on a westerly course 20 miles west of Bawean. This was approximately the same position in which they had been found at about 1350 that afternoon. The news was forwarded to Admiral Doorman, but presumably he was already well on his way south when he received it.

Enemy planes continued to follow our movements—as indeed they did the rest of the night. At 2009, while our ships were on a southerly course, a single flare was dropped above them. One of our cruisers, seemingly the *Houston,* fired star shells, but nothing was to be seen. A few minutes later (at 2023) what appeared to be four enemy destroyers were observed on our port bow. It was thought that they fired torpedoes and our ships turned left to avoid them. Again at 2043 it was reported that torpedoes were fired, on our starboard bow this time, and course was altered to 175°.

Retirement of American destroyers; loss of "Jupiter".

By 2100 our striking force was again near the coast of Java, between Soerabaja and Toeban. Our destroyers had not had opportunity to take on fuel the preceding afternoon, and their supply was low. After 24 hours of high-speed steaming they were experiencing increasing difficulty in keeping up with the cruisers. Comdr. Binford says, "Realizing that I had no more torpedoes and that further contact with the enemy would be useless, since my speed and gunpower were less than anything I would encounter . . . I retired to Soerabaja, which was about 50 miles away."

This retirement of Division 58 did not escape the notice of the enemy, for as our destroyers were entering the channel in the mine field a plane dropped a flare above them. While they were still in the channel orders came from Admiral Doorman to retire to Batavia and to receive orders later for torpedo replacements. Comdr. Binford replied that it was impossible to get through to Batavia and that he was entering Soerabaja to fuel, after which he would proceed as directed. He never received another message from the commander of the striking force.

Pope, which had completed repairs and had been standing outside the mine field waiting for an opportunity to join our striking force, was ordered to return to Soerabaja with our other destroyers. The *Exeter* and *Witte de With* were already there when our ships tied up at Holland Pier and started fueling. They left the pier and returned to the anchorage well before morning brought the daily air raid.

After the departure of the American destroyers the remaining ships of our striking force turned westward along the north coast of Java. They were in a single column led by *Encounter,* followed by *De Ruyter, Perth, Houston, Java,* and *Jupiter.* They had been on this westerly course for about 20 minutes when at 2125 there was an underwater explosion on *Jupiter's* starboard side abreast her engine room and she flashed a signal to the *Java,* "*Jupiter* torpedoed." [67]

A survivor describes the situation: "We had not blown up. We had not sunk. We had, in fact, just stopped, and the same oppressive silence of a ship in dock during the night watches descended on us." There was ample time for the launching of boats and rafts, but before the boats

[67] The position was lat. 06°45′ S., long. 112°5.5′ E. It has been suggested that *Jupiter* may have struck one of the newly laid Dutch mines. However, the fact that she was the last ship of a column makes this appear unlikely. Furthermore, Admiral Doorman certainly knew the position of the mine field. The impression on board the destroyer was that she had been torpedoed.

could return from the beach for a second load the destroyer heeled over to port and sank at about 0130. A detachment of the Dutch Army on guard along the coast came to the aid of the survivors.[68]

Loss of "De Ruyter" and "Java."

Immediately after the loss of the *Jupiter* our striking force turned north. At 2217 it again passed the spot where the *Kortenaer* had gone down that afternoon, and survivors of the Dutch destroyer saw our cruisers foam past at high speed. *Encounter* was ordered to stop and picked up 113 men of the *Kortenaer's* crew of 153. It was at first intended to take them to Batavia, but upon learning of a strong Japanese force to the west the captain returned to Soerabaja.

The cruisers of our striking force were now left without any destroyer protection whatever. This dangerous situation was aggravated by the fact that enemy planes continued to light their course with flares. But Admiral Doorman's orders were, "You must continue attacks until the enemy is destroyed," and he pressed on north with a grim determination to reach the enemy convoy.

It is doubtful if he ever knew how close he did come to reaching it in this last magnificent attempt. The convoy had in fact remained in the area west or southwest of Bawean. At 1850 a PBY from Patrol Wing TEN had taken off to shadow it in the bright moonlight. At 1955 this plane saw star shells above 3 cruisers and 8 destroyers on a northerly course about 30 miles southwest of Bawean. As these appeared to be our own striking force no contact report was made.[69] At 2235 our PBY found the convoy southwest of Bawean. Twenty-eight ships were counted in 2 groups, escorted by a cruiser and a destroyer. At this moment Admiral Doorman was headed toward this very spot, but it is doubtful if he ever received our plane's report. It reached the Commander of the Naval Forces at Soerabaja at 2352, after which it was sent on to the commander of our striking force; but by that time both the *De Ruyter* and *Java* were already beneath the waters of the Java Sea.

At 2315 the *De Ruyter* signalled, "Target at port four points." In that direction were seen two cruisers which opened fire from a distance of

[68] A survivor says that 83 men, including 5 wounded, reached the beach, but in Soerabaja next day Comdr. Eccles heard that 214 survivors were at Toeban. This larger figure is probably correct, as under the circumstances most of the crew should have reached shore safely. Probably 83 landed at a single point.

[69] It seems unlikely that these were ours, as the striking force was on a southerly course at that time.

525837°—43——6

about 9,000 yards. *Perth* replied with two or three salvos which landed on one of the enemy cruisers for several hits. The Japanese thereupon fired star shells which exploded between their ships and ours so that we could no longer see them.

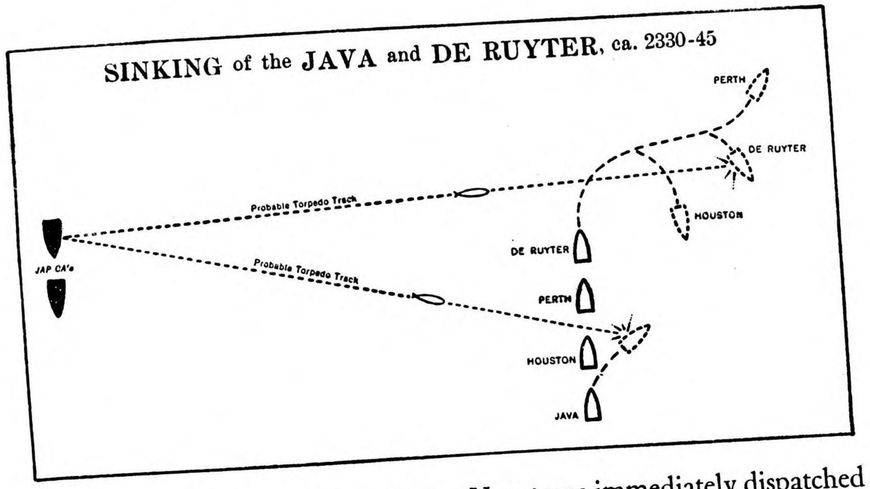
Shortly afterward the *De Ruyter* received a hit aft and turned to starboard away from the enemy, followed by our other cruisers. As the *Java,* which had not been under enemy fire, turned to follow there was a tremendous explosion aft, evidently caused by a torpedo coming from port. Within a few seconds the whole after part of the ship was enveloped in flames.

The *De Ruyter* had continued her turn onto a southeasterly course when, very closely after the *Java,* she too was caught by a torpedo. United States Signalman Sholar, who was on board and was subsequently rescued, reported having seen a torpedo track on relative bearing 135°. There was an extraordinarily heavy explosion followed by fire. *Perth,* behind the flagship, swung sharply to the left to avoid a collision, while the *Houston* turned out of column to starboard. The crew of the *De Ruyter* assembled forward, as the after part of the ship up to the catapult was in flames. In a moment the 40-mm. ammunition began to explode, causing many casualties, and the ship had to be abandoned. She sank within a few minutes. For some time her foremast structure remained above the water, until a heavy explosion took the ship completely out of sight.[70]

The torpedoes which sank the two Dutch cruisers apparently came from the direction of the enemy cruisers and were probably fired by them. Both *Sendai* and *Nati* class cruisers are equipped with eight torpedo tubes.

Of our entire striking force, only the *Houston* and *Perth* now remained. They had expended most of their ammunition and were still followed by enemy aircraft. There seemed no possibility of reaching the enemy convoy, and about 0100 (February 28th) the two cruisers set course for Tandjong Priok in accordance with the original plan for retirement after the battle. On the way *Perth* informed Admiral Koenraad at Soerabaja of their destination and reported that the *De Ruyter* and *Java* had been disabled by heavy explosions at latitude 06°00′ S., longitude

[70] On the afternoon of the 28th the United States submarine *S-37* found a lifeboat crowded with 60 survivors of the *De Ruyter.* She took on board U. S. Signalman Sholar and another of the American liaison group, but could not take more. She left 5 days' rations and water for the others. There is no mention of their reaching Java and it seems likely that they were taken by the Japanese.



112°00′ E.[71] The hospital ship *Op ten Noort* was immediately dispatched toward the scene of their loss, but it is doubtful if she ever reached it. Some time later Admiral Helfrich lost radio contact with the ship, and a plane reported seeing her in the custody of two Japanese destroyers.

The Japanese convoy remained west of Bawean. About 0130 our PBY saw a column led by a cruiser, followed by four destroyers with a second cruiser bringing up the rear. This was about 25 miles from the convoy and moving toward it. For a while our pilot believed that it was our striking force about to attain its objective, but a little later it became apparent that this was merely the enemy screening force—possibly the same ships which had just sunk the *De Ruyter* and *Java.* When our PBY left shortly after 0200 a Dutch Catalina plane took up shadowing the convoy, which remained in approximately the same position until dawn.

During the forenoon of the 28th as the *Perth* and *Houston* approached Priok, they were followed by Japanese reconnaissance planes. Fighters came out from Batavia to protect them, but there was no attack and the two cruisers reached port safely at 1330.

AFTERMATH OF BATTLE

In the Battle of Java Sea the Japanese successfully prevented our striking force from reaching their convoys. They paid a price for their

[71] How close our striking force came to reaching the convoy is indicated by the fact that our PBY reported the transports at lat. 06°07′ S., long. 112°05′ E., at 2235.

success. Two or three cruisers, two of them probably heavy, and at least two or three destroyers were severely hit and set on fire. Some of these ships probably sank. On the other hand we lost the cruisers *De Ruyter* and *Java* and the destroyers *Kortenaer, Electra,* and *Jupiter*—losses which we could ill afford.

The battle also resulted in the splitting of what remained of our striking force. At Soerabaja were five American destroyers, plus the *Exeter, Encounter,* and *Witte de With.* At Tandjong Priok were the *Houston, Perth,* and the Dutch destroyer *Evertsen,* which had just arrived from convoy duty. There were strong enemy forces between the two ports and there seemed no possibility of uniting our forces. Further, our remaining ships were in no condition for another battle. They had expended most of their ammunition. (*Houston* had had to use hers sparingly in the later stages of the battle.) The *Exeter* was limited to 16 knots. The *Houston* had received two 8-inch hits. These had caused no casualties and little damage, but it will be remembered that only two of her turrets were working. Of our five destroyers only *Pope* had torpedoes. The Dutch *Witte de With* had damaged her propellers, so that it was unlikely that she would be able to leave port soon.

But Admiral Helfrich would not concede defeat. The indomitable Dutchman planned to reassemble his forces at Tjilatjap, the only Java port that could possibly be used, and continue the fight. First, however, the problem of withdrawing our ships from the Java Sea had to be faced. The Japanese now controlled the exits. To the east they had reinforced Bali, while to the west they had captured positions on the shore of Soenda Strait. There was evidence that naval forces were on patrol at both places, while their planes ranged over the entire area.

On the morning of the 28th Comdr. Binford telephoned Admiral Glassford to advise him of "the vital necessity of leaving Soerabaja that day and no day later." Since the American destroyers were of no use without torpedoes Admiral Helfrich authorized Destroyer Division 58 to proceed to Australia for rearming. In the afternoon Comdr. Binford received orders to leave Soerabaja by the eastern entrance and to direct *Pope* to report to the *Exeter* for duty.

In accordance with Admiral Helfrich's plan to reassemble his striking force at Tjilatjap, Rear Admiral Palliser ordered the *Exeter* to sail for that port. She was to be accompanied by *Encounter* and *Pope.* She had had some minor repairs but was able to do only 16 knots when she sailed

on the evening of the 28th. The problem of her route was carefully considered. Her draft was too great to permit her to use the eastern exit from Soerabaja. If she went north around Madoera she would be found within close range of the Bali airfield by daylight. Rear Admiral Palliser therefore decided to send her west. She was to go north, east of Bawean, skirt the south coast of Borneo by daylight and run for Soenda Strait the following night.

Soon after leaving Soerabaja the cruiser and two destroyers were discovered by an enemy reconnaissance plane, and about 1200 on March 1st they reported that three enemy cruisers were approaching. This was the last that was heard of the three ships.

The story of the three ships at Priok is all too similar. On the afternoon of the 28th Admiral Glassford ordered Captain Rooks of the *Houston* to leave for Tjilatjap via Soenda Strait that night in company of *Perth* and *Evertsen. Perth* was undamaged but had fired all her torpedoes. The three ships took on most of the fuel oil remaining at Priok and the two cruisers sailed about 2120 that night. For some unknown reason *Evertsen* did not sail until an hour or two later. About midnight the Dutch destroyer reported a sea battle in progress off St. Nicolas Point. Admiral Helfrich then sent orders to *Houston, Perth,* and *Evertsen:* "If any of addressees are engaged with enemy, others render assistance as possible." Some time later *Evertsen* reported that she had been intercepted by two cruisers and had beached herself in a sinking condition on Seboekoe Island. Nothing further has been heard of the three ships.

Only the four American destroyers made good their escape. Soerabaja was subjected to almost continuous air raids on the 28th, and at 1510 two waves of bombers attacked the harbor airfield unopposed. None of the American ships was hit, however, and Comdr. Binford, Comdr. Eccles and Lt. Comdr. Parker made careful plans for their excursion. *Edwards* and *Alden* got under way about 1700 and *Ford* and *Paul Jones* half an hour later. In order to deceive enemy reconnaissance *Ford* stood up the western approach for a few miles before reversing course to proceed out the eastern gate. Our ships met near the lightship and formed into column, *Edwards, Alden, Ford,* and *Paul Jones.* They then proceeded at 2 knots along the north coast of Java out Madoera Strait, south of the mine field.[72]

[72] The Madoera Strait area is shown in the chart facing p. 28.

Witte de With was not in condition to accompany the American destroyers. She remained in port for further repairs and was lost in dock when bombed the next day.[73]

It was a clear night with brilliant moonlight when our ships left Soerabaja. A light breeze from the southeast left the sea smooth. On the way out they passed a Dutch vessel patrolling the minefield, but there was no challenge. About 2030 our destroyers went to general quarters and preparations were made for battle. "Particular attention was given to covering all reflecting surfaces." Shortly after midnight they passed out of the southern mine channel and entered the narrows of Bali Strait.[74] Several small sailboats were sighted, but that was all.

Our ships hugged the shore of Java as closely as they dared. The excellent navigation of Lieut. William J. Giles, Jr., on the *Edwards* brought them safely through these difficult waters. The moon was on the port beam about 45° above the horizon. From time to time a passing cloud obscured it. About 0115 our ships passed the narrows and increased speed to 25 knots. As they were emerging from the strait about 0210 an enemy destroyer was seen some 8,000 yards on the port bow, "obviously patrolling the southern entrance to Bali Strait." Shortly afterwards dim flashing lights were seen to the south and two more destroyers appeared in that direction. The ships were clearly visible in the moonlight, but apparently did not see our own ships against the dark shoreline.

However, about 0230 our destroyers had to turn east to avoid the reef off the eastern tip of Blambangan Peninsula. The enemy at last saw us and opened fire on relative bearing 225°. The first salvo fired at the *Ford* straddled her, and subsequent ones were very close, but the shells did not come very near our other ships.[75]

Our own ships increased speed to 27 knots and returned the fire at once. Initial range was 5,000–6,000 yards with a continuous 500-yard rocking ladder which crossed the target several times. But we scored no hits. Some of our destroyers did not use their forward guns, because

[73] On the same day the Dutch destroyer *Banckert*, which had been damaged by a near hit on the 24th, had to be destroyed by her own crew.

[74] See chart opposite p. 57.

[75] Lt. Comdr. Cooper of the *Ford*: "The Japanese were undoubtedly using radar, as the opening and subsequent salvos were very close." Lt. Comdr. Parker: "The first Japanese salvo fired at the *Ford* straddled her, but no further shots near the ship were observed." Lt. Comdr. Coley of the *Alden* says that splashes, seemingly of 5-inch shells, were about 1,000 yards short. Comdr. Binford: "Enemy fire was well over and splashes nowhere near the formation."

the flashes would interfere with the difficult navigation. "An attempt was made to keep up a rapid volume of fire rather than an effective fire. . . . Our aim was to keep the enemy outside effective torpedo range. Torpedo fire was simulated by means of primers and dummy charges."[76] Comdr. Binford says, "My idea was to fight off the enemy and to retire to the south as quickly as possible, because I expected other enemy forces in the immediate vicinity. Information from Dutch Staff Headquarters was that a Dutch ammunition ship was sunk in Bali Strait on February 27th, and on the day of my sailing an enemy cruiser and destroyer sank a Dutch merchant ship in Bali Strait." After a few minutes of lively fire the increasing range put an end to the action and the enemy dropped astern.

Some of our ships made smoke. Comdr. Eccles remarks that under the circumstances this was unwise, "because it made a target of the division for any heavier ships which might be taking up the pursuit from the eastern part of Bali." We had, however, definitely shaken off the enemy destroyers. At 0321 they could be seen firing astern. Our officers suspected that they hoped to locate our ships by our gun flashes if we answered.

Next morning our destroyers expected an air attack, but it did not materialize. Probably the Japanese were entirely occupied with their landing on Java. The voyage was without further incident except for some engineering difficulties. Destroyer Division 58 set course for Exmouth Gulf and later, upon a change of orders, for Fremantle, where they arrived at 1645 on March 4th.

END OF THE NAVAL COMMAND IN JAVA

Our ships had been ordered to assemble at Tjilatjap, but it was obvious that their position would be highly precarious. The fuel situation there was very serious. After the sinking of the *Langley* and *Pecos* a bombing of the port could be expected at any time. It was a subject for wonder that it had escaped so long.

During the night of the 28th the Japanese landed at two points on the northern coast of Java. About midnight a United States Army bomber en route from Java to Australia reported a strong enemy force on a northwest course 150 miles southeast of Tjilatjap. There were two groups,

[76] From report of Lt. Comdr. Cooper of the *Ford*.

one of transports and light forces, the other consisting of two battleships or battle cruisers, accompanied by several cruisers and destroyers. Enemy submarines were active off Tjilatjap and it was known that an aircraft carrier was operating south of Java.

These considerations indicated that neither Tjilatjap nor any other port in Java was any longer tenable as a base for our surface forces. Rear Admiral Glassford had orders to retire to Australia whenever it should become necessary to abandon Java. Rear Admiral Palliser had orders from his government to withdraw British ships from Java when further resistance would serve no purpose. It appeared that that time had come. On the morning of March 1st Admiral Helfrich gave permission for the withdrawal of the British ships and instructed Admiral Glassford to order his ships to Australia.

During the forenoon, after consultation with the Governor General, Mr. van Mook, Admiral Helfrich advised the American and British Admirals that the Allied Naval Command in the Netherlands East Indies was dissolved by his own order. Sometime later he sent for Admiral Glassford and expressed to him the gratitude felt by the Dutch for the loyal support of the United States Navy under his command in the defense of Java.

With the dissolution of the Allied Command Admiral Glassford at once ordered all United States surface ships of his command then in Java waters to proceed to Australia. At Tjilatjap were the destroyers *Pillsbury*, and *Parrott*, the gunboats *Tulsa* and *Asheville*, *Lanakai* and *Isabel*, the mine sweepers *Whippoorwill* and *Lark*. *Whipple* and *Edsall* were operating south of Java. The cruiser *Phoenix* was en route for Java, having been released from convoy duty, and the *Otus* was on her way to Java from Ceylon, to which she had accompanied the *Marblehead*. These ships were ordered to proceed to Exmouth Gulf, Australia, through a common rendezvous, at which they were not to remain but where they might pick up other Allied ships for mutual support. British and Australian ships in the Java area received identical orders.

Of the vessels thus dispatched *Edsall*, *Pillsbury*, *Asheville*, and a few British corvettes have not been heard from and are considered lost. The rest while en route received orders not to put in at Exmouth Gulf unless in need of fuel, but to proceed to Fremantle, where a secure base was subsequently established.

The Japanese landing on Java meant that Allied Headquarters at Bandoeng had to be abandoned promptly. Admiral Glassford with his staff left for Tjilatjap by automobile. From that port he proceeded to Australia by plane, while others followed by plane and submarine.

Some submarines remained in the Java Sea operating against the Japanese, and Dutch and Allied forces in Java continued resistance for some time. But their efforts could only delay the occupation by the Japanese of this island with a population greater than that of England. With the abandonment of Java by the Allied navies on March 1st the Java Sea Campaign came to an end.

OBSERVATIONS

Throughout the Java Sea Campaign the Allied navies faced an enemy of greatly superior strength. This superiority enabled the Japanese to maintain the initiative—and in one sense the entire campaign is a comment on the value of the initiative. The Japanese exploited their advantage with skill. They repeatedly brought in large numbers of transports with only small losses, in spite of the efforts of our submarines and surface forces. By building up what was often only a local superiority they took with rather small forces positions which should have been highly defensible—if we had only had the means to defend them.

As a result of the enemy's superiority we were forced to withdraw from one base to another, from one headquarters to another. The problem of reorganizing headquarters with each move and of establishing proper communications was tremendous. Although our officers met it with great resourcefulness, it still distinctly handicapped our operations.

Similarly, we seldom enjoyed a secure base of operations. Enemy bombers drove us from one base to another, and we never had the fighter strength to oppose them. This circumstance deprived our crews of opportunity for proper rest and greatly handicapped us in the maintenance and repair of our ships. Our ships deteriorated appreciably during the campaign because of the pressure of constant duties and inadequate repair facilities. The *Boise* was eliminated from the campaign by the necessity of going all the way to India for repairs. In the later stages of the campaign "a damaged ship was a lost ship." We lost *Stewart* and the Dutch lost *Banckert* through bomb damage received in dock, and *Witte de With* was lost because of lack of opportunity for repairs.

Even with the best will on all sides, the practical difficulties of international cooperation are tremendous. That we succeeded as well as we did is a tribute to the men involved. It has been pointed out that we did not achieve a unified command in the strict sense of the word, although we achieved a high degree of cooperation. Neither were the various services completely coordinated. It was never possible to plan a combined air and naval operation.

The circumstances attending the Battle of Java Sea gave little opportunity for planning and the polyglot character of our striking force made inapplicable the sort of tactical doctrines which would have prevailed had only a single navy been represented. The inadequacy of communications was a formidable handicap, and their breakdown in the midst of the battle condemned us to "follow-the-leader" tactics. It seems evident that the information which reached Admiral Doorman was inadequate (through no fault of our reconnaissance planes) or arrived only after so great a delay as to be almost useless. Had our planes been able to communicate directly with our striking force our chances of reaching the convoy would have been improved.

The careful coordination of Japanese surface vessels with planes and submarines in the battle will not escape notice. Their effective use of torpedoes will also be remarked. Only the *Electra* was sunk by gunfire. The *De Ruyter, Java, Kortenaer,* and probably the *Jupiter* were victims of torpedoes fired by either cruisers, destroyers, or submarines.

Whether or not it was part of the enemy's plan, the battle resulted in the splitting of our forces and their destruction in detail.

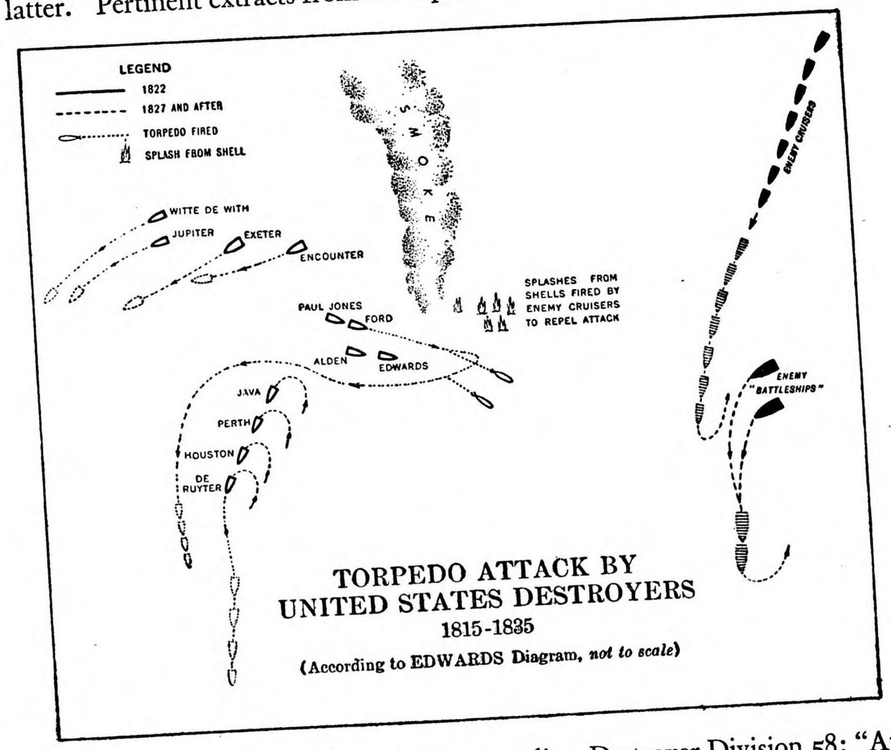
This narrative has done considerably less than justice to our submarines. It has not been practicable to trace their individual movements and successes. But the courage and skill with which they were handled enabled them to inflict probably greater damage on the enemy than any other element of our forces.

One of the noteworthy aspects of the campaign was the manner in which our men stood up to constant activity and the strain of repeated engagements and bombings. The final battle was fought after Admiral Doorman considered that the men had passed the limits of physical endurance. In spite of these handicaps Admiral Glassford says, ". . . the fighting spirit and morale of the personnel of my force continued to be of the highest order. Our deficiencies in material strength, as compared to the force brought to bear by the enemy, were offset in a larger measure

than is perhaps realized by the steadfast spirit and morale of our officers and men, who, in general, maintained the highest traditions of the United States Navy."

APPENDIX I—DESTROYER DIVISION 58'S TORPEDO ATTACK

There is general agreement as to the principal facts of our torpedo attack, but it is very difficult to draw an accurate picture of the movements of our cruisers and destroyers and their relative positions. Neither is it clear whether the enemy lay to the northeast or to the northwest. A diagram accompanying the *Edwards'* report indicates the former, while one accompanying the *Alden* report (reproduced p. 71) indicates the latter. Pertinent extracts from the reports follow.



TORPEDO ATTACK BY UNITED STATES DESTROYERS
1815-1835
(According to EDWARDS Diagram, *not to scale*)

Comdr. Thomas H. Binford, Commanding Destroyer Division 58: "At 1816 received signal 'cover my retirement' . . . By this time I had the division back in column and through the smoke could see the enemy battle line about 12 or 13 thousand yards and fired torpedoes to starboard, then by column movement changed course so as to fire the port torpedoes,

started laying smoke screen and followed cruisers. At 1831 received signal 'follow me.' "

Comdr. Henry E. Eccles, commanding *J. D. Edwards:* "We headed in to make smoke and then saw the enemy advancing at a range of about 15,000 yards—torpedoes were fired at long range to force him to turn away and we withdrew following Commander Combined Striking Force signal 'follow me.' "

Log of the *Edwards:* "1815 signal 'cover my retirement.' 1822 fired three torpedoes to starboard at two ships in enemy battle line . . . 1827 fired three (3) torpedoes to port on course 085° T., stopped smoke. Estimated range to enemy at time of firing 14,000 yards. 1831 signal from *De Ruyter* 'follow me.' "

Lt. Comdr. Jacob E. Cooper, commanding *Ford:* "About 1815 our force came left to about east; orders were again received to fire torpedoes. The Japanese main body was on our starboard bow, distance about 20,000 yards, target angle about 75°. The range was closed to about 14,000 yards and all torpedoes on the starboard side were expended. Course was then changed to permit the firing of the six torpedoes in the port battery. The last one was expended at 1827. The four United States destroyers were in column at the time of firing; individual target plan was used. The destroyers then passed under the stern of our main body and resumed position on their disengaged quarter on a course between east and northeast."

Lt. Comdr. Edward N. Parker, commanding DesDiv 59 (on *Ford*): "At about 1820 the four (4) United States destroyers attacked with torpedoes, broadside fire, on enemy forces bearing to northward, range about 15,000 yards, target angle about 045°. Reversed course by column movement and fired second broadside, then laid a smoke screen to cover our forces, including the *Exeter.*"

Lt. Comdr. Lewis E. Coley, commanding *Alden:* "Then at 1820 signal was made to attack. At 1822 *Alden* fired starboard torpedo battery on order from Commander Destroyer Division 58. The target angle was estimated by the navigator to be 60°, enemy speed 20 knots. Enemy range was estimated at about 22,000 yards. . . . *Alden* then reversed course following the *John D. Edwards* and fired the port battery of torpedoes at 1827. A sight angle of 17 was used on the starboard battery and 22 on the port battery. The firing course for the port battery was 110°, for the starboard battery about 290° [surely this is reversed]. At

1832 *Alden* came to course 030° in column with rest of DesDiv 58 astern of cruisers, speed 27 knots."

Lt. Comdr. John J. Hourihan, commanding *Paul Jones:* "At 1728 this division laid smoke screen to cover cruiser line and again at 1819 to cover cruiser retirement. At this latter time, the division was between the battle lines and signal was received from ComDesDiv 58 in *U. S. S. John D. Edwards* to fire torpedoes. At 1821 five torpedoes of starboard battery were fired at enemy line bearing 290° T., distant approximately 15,000 yards. . . . Course was reversed by column movement and six torpedoes of the port broadside were fired. Division then followed the cruisers in retirement."

APPENDIX II—CONTACT REPORTS BEFORE AND DURING THE BATTLE OF JAVA SEA

(Times are —7½)

FEBRUARY 26th:

1. 1150: 30 transports, 2 cruisers, 4 destroyers. Position: lat. 04°50′ S., long. 114°20′ E. (near Arends Islands), course 245°, speed 10 knots. (This was sent to Admiral Doorman at 1250.)

2. 1440: 2 *Isuzu* class cruisers, 2 destroyers. Position: lat. 06°25′ S., long. 117°13′ E., course 315°, speed 10–20 knots. (Admiral Helfrich sent this report to Admiral Doorman at 1445.)

3. 1700: Dutch reconnaissance plane attacked by 2 cruiser catapult planes at lat. 06°05′ S., long. 113°15′ E., and lat. 05°40′ S., long. 113°05′ E. (Plane reports upon return at 1900; report forwarded to Admiral Doorman at once.)

4. 1830: U. S. Army bombers bomb Japanese convoy, course unknown. Position: lat. 05°30′ S., long. 113°00′ E. (northeast of Bawean). (This report was received at Soerabaja at 2220, after which it was forwarded to Admiral Doorman, who complained of the delay of 6–8 hours in forwarding of reports.)

FEBRUARY 27th:

5. 0255: Admiral Doorman received the following amplification of No. 4: Convoy lat. 05°30′ S., 113°00′ E., 18 or more ships, 1 possible aircraft carrier or battleship. Six fighter planes protecting convoy reported by Dutch Navy plane at 1440/26.

6. 0510: Report of Dutch reconnaissance plane after landing broadcast to all Allied warships.
   (*a*) 2030/26 1 heavy transport, lat. 05°20′ S., long. 113°38′ E.
   (*b*) 2230/26 2 destroyers, lat. 05°12′ S., long. 112°20′ E.
   (*c*) 0005/27 2 transports, lat. 05°28′ S., long. 112/24′ E.
   (*d*) 0020/27 1 transport, lat. 05°42′ S., long. 113°00′ E.

7. (*a*) 1340: 20 ships, unknown number of destroyers. position: lat. 04°45′, S., long. 112°15′ E., course 180°.

(*b*) 1345: One cruiser. Position: lat. 04°04′ S., long. 111°07′ E., course 220°.

(*c*) 1350: Great fleet with 2 cruisers, 6 destroyers, 25 transports. Position: 20 miles west of Bawean, course south (Cf. report No. 10). (These reports sent to Admiral Doorman at 1445 and (*c*) causes him to go out for Battle of Java Sea.)

8. 1555: 3 cruisers, 5 transports. Position: lat. 06°50′ S.,[77] long. 112°10′ E., course 190°. (This report was sent to Admiral Doorman at once.)

9. (*a*) 1630: 5 large ships, several small. Position: lat. 06°20′ S., long. 115°30′ E., course 315° (bombed by Allied planes).

(*b*) 1757: 35 ships, including 1 cruiser, 4 destroyers. Position: lat. 05°10′ S., long. 111°35′ E., course 170°. (These reports forwarded to Admiral Doorman at 1805.)

1830: Admiral Doorman reports that the enemy is retreating and asks position of the convoy.)

10. 1700: 45 transports, 3 cruisers, 12 destroyers. Position: 20 miles west of Bawean (Cf. report No. 7c). Bombed by U. S. Army bombers. (This news received unofficially at Soerabaja at 1930 and relayed to Admiral Doorman. Official report not received at Soerabaja till 2125.)

1850: U. S. PBY–5 (PatWing 10) leaves Soerabaja to shadow enemy convoy.

11. 1955: 3 cruisers and 8 destroyers. Position: 30 miles southwest of Bawean, course north. (Seen by American PBY. Pilot believes this is our striking force and sends no report.)

12. 2235: 28 ships in two groups of 16 and 12, 1 cruiser, 1 destroyer, courses 300° and 330°. Position: lat. 06°07′ S., long. 112°05′ E. (This report was received at Soerabaja at 2352 and forwarded to Admiral Doorman. The *De Ruyter* almost certainly sank before he received it.)

2300: Dutch Catalina Y–67 takes off. Its pilot received with his instructions a list of the above contacts and two not listed above:

13. 1800–0227: 4 cruisers and 4 destroyers. Position: lat. 05°40′ S., long. 111°35′ E.

14. 2100–0227: 9 destroyers: Position: lat. 06°20′ S., long. 111°50′ E. (These were at the time thought to be our own, but this seems unlikely.)

[77] This is apparently an error for either 05°50′ S., or 06°01′ S.

FEBRUARY 28th:

15. 0130: 2 cruisers, 4 destroyers about 25 miles distant from the convoy on course toward it. (U. S. PBY pilot at first believed this was our striking force and did not report the contact till 0150.)

0212: U. S. PBY–5 turns back to Soerabaja.

16. 0200: Convoy position: lat. 05°40′ S., long. 111°40′ E.[78]

17. 0335: Report forwarded from Soerabaja (a composite of the reports of PBY–5 and Y–67): Convoy of 39 transports in two columns 1,500 yards apart, course north, speed 10. Three destroyers in column right flank, 1 cruiser and 2 destroyers in column left flank. Two cruisers and 6 destroyers moving toward convoy at high speed. Position as of 0212, lat. 05°56′ S., long. 112°46′ E.

18. 1430: Convoy position: lat. 05°55′ S., long. 112°05′ E. (Report of Dutch Y–60.)

19. 1552: Convoy 60 ships. Position: lat. 06°15′ S., long. 112°15′ E., course 90°, speed 10. (Report of Dutch Y–60.)

[78] This longitude may be an error for 112°40′ E. Cf. report No. 17. (Report of Dutch Y–67.)

APPENDIX III

DESIGNATIONS OF U. S. NAVAL AIRCRAFT

Model	Class	Manufacturer	U. S. name	British name
BD	Bomber	Douglas	Havoc	Boston III Havoc.
F2A	Fighter	Brewster	Buffalo	Buffalo.
F3A	do	do	Corsair	
F4F	do	Grumman	Wildcat	Martlet.
F6F	do	do	Hellcat	
XF7F	do	do		
FG	do	Goodyear	Corsair	
FM	do	Eastern Aircraft	Wildcat	Martlet V.
F4U	do	Chance-Vought	Corsair	Corsair.
GB	Transport	Beech	Traveler	
GH	do	Howard		
GK	do	Fairchild	Forwarder	
HE	Ambulance	Piper	Grasshopp'r	
J2F	Utility	Grumman	Duck	
J4F	do	do	Wedgeon	
JRB	Utility, multi-engine	Beech	Voyager	
JRF	do	Grumman		Goose I.
JRS	Utility, multi-engine	Vought-Sikorsky		
JR2S	do	Vought-Sikorsky	Excalibur	Excalibur.
NE	Trainer, primary	Piper	Grasshopp'r	
NH	Trainer, advanced	Howard		
NP	Trainer, primary	Spartan		
NR	do	Ryan	Recruit	
N2S	do	Stearman (Boeing)	Caydet	Caydet.
N2T	do	Timm	Tutor	
N3N	do	Naval Aircraft Factory.		
OS2N	Observation scout	do	Kingfisher	Kingfisher.
OS2U	do	Vought-Sikorsky	do	
XPBB	Patrol bomber, 2-engine, boat.	Boeing	Sea Ranger	
PBJ	Patrol bomber, 2-engine, land plane.	North American	Mitchell	
PBM	Patrol bomber, 2-engine, boat.	Martin	Mariner	Mariner.
PBN	do	Naval Aircraft Factory.	Catalina	
PBO	Patrol bomber, 2-engine, landplane.	Lockheed	Hudson	Hudson III.
PBY-5	Patrol bomber, 2-engine, boat.	Consolidated	Catalina	Catalina.
P4Y	do	do		Do.
XPB2M	Patrol bomber, 4-engine, boat.	Martin	Mars	
PB2Y-3	do	Consolidated	Coronado	
PB4Y	Patrol bomber, 4-engine, landplane.	do	Liberator	Liberator.
PV	Patrol bomber, 2-engine, landplane.	Vega	Ventura	Ventura.

DESIGNATIONS OF U. S. NAVAL AIRCRAFT—Continued

Model	Class	Manufacturer	U. S. name	British name
R5C	Transport, multi-engine	Curtiss	Commando.	
R4D-1	do	Douglas	Skytrain	
R4D-2	do	do		
R4D-3	do	do	Skytrooper	
R4D-4	do	do		
R5D	do	do	Skymaster	
R5O	do	Lockheed	Lodestar	Lodestar.
RB-1	Transport (cargo), multi-engine.	Budd		
SB2A	Scout bomber	Brewster	Buccaneer	Bermuda.
SBC	do	Curtiss	Helldiver	Cleveland.
SB2C	do	do	do	
SBD	do	Douglas	Dauntless	
SB2D	do	do		
SBF	do	Fairchild	Helldiver	
SBN	do	Naval Aircraft Factory.		
SB2U	do	Vought-Sikorsky	Vindicator	Chesapeake.
SBW	do	Canadian Car and Foundry.	Helldiver	
SNB-1	Trainer, advanced	Beech	Kansas	
SNB-2	do	do	Navigator	
SNC	do	Curtiss	Falcon	
SNJ	do	North American	Texan	Harvard, I, II.
SNV	do	Vultee	Valiant	
SOC	Scout observation	Curtiss	Seagull	Seamew.
SO3C	do	do	do	
TBD	Torpedo bomber	Douglas	Devastator	
TBF	do	Grumman	Avenger	Tarpon.
TBM	do	Eastern Aircraft	do	
TBV	do	Vultee		

SYMBOLS OF U. S. NAVY SHIPS

AB	Crane ship.
ACV	Auxiliary aircraft carrier.
AD	Destroyer tender.
AE	Ammunition ship.
AF	Store ship.
AG	Miscellaneous auxiliary.
AGC	General communications vessel.
AGS	Surveying ship.
AH	Hospital ship.
AK	Cargo ship.
AKF	Refrigerated cargo ship.
AKS	General stores issue ship.
AM	Large mine sweeper.
AMb	Base mine sweeper.
AMc	Coastal mine sweeper.
AN	Net layer.
AO	Oiler.
AOG	Gasoline tanker.
AP	Transport.
APc	Coastal transport.
APD	Troop transport (high speed).
APH	Transport for wounded.
APR	Rescue transport.
APS	Auxiliary cargo submarine.
APV	Aircraft transport.
AR	Repair ship.
ARD	Floating drydock.
ARH	Heavy hull repair ship.
ARS	Salvage vessel.
AS	Submarine tender.
ASR	Submarine rescue vessel.
AT	Ocean-going tug.
ATR	Salvage tug.
AV	Seaplane tender (large).
AVC	Catapult lighter.
AVD	Seaplane tender (converted DD).
AVP	Seaplane tender (small).
BB	Battleship.

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SYMBOLS OF U. S. NAVY SHIPS—Continued

CA	Heavy cruiser.
CB	Large cruiser.
CL	Light cruiser.
CM	Mine layer.
CMc	Coastal mine layer.
CV	Aircraft carrier.
DD	Destroyer.
DE	Destroyer escort vessel.
DM	Light mine layer (high speed).
DMS	Mine sweeper (high speed).
IX	Unclassified.
LCI(L)	Landing craft, infantry (large).
LCM(2)	50-foot landing craft, mechanized, Mk. II.
LCM(3)	50-foot landing craft, mechanized, Mk. III.
LCP(L)	36-foot landing craft, personnel (large).
LCP(R)	36-foot landing craft, personnel (with ramp).
LCR(L)	Landing craft, rubber (large).
LCR(S)	Landing craft, rubber (small).
LCS(S)	Landing craft, support (small).
LCT(5)	Landing craft, tank, Mk. V.
LCV	Landing craft, vehicle.
LCVP	Landing craft, vehicle and personnel.
LSD	Landing ship, dock.
LST	Landing ship, tank.
LVT	Landing vehicle, tracked (unarmored).
LVT(A)	Landing vehicle, tracked (armored).
PC	Submarine chaser.
PE	Eagle boat.
PG	Gun boat.
PR	River gun boat.
PT	Motor torpedo boat.
PTC	Motor boat submarine chaser.
PY	Yacht.
PYc	Coastal yacht.
SM	Mine laying submarine.
SS	Submarine.
YA	Ash lighter.
YAG	District auxiliary, miscellaneous.
YC	Open lighter.
YCF	Car float.
YCK	Open cargo lighter.
YCV	Aircraft transportation lighter.
YD	Floating derrick.
YDT	Diving tender.
YF	Covered lighter; range tender; provision store lighter.
YFB	Ferry boat and launch.
YFD	Floating drydock.
YFT	Torpedo transportation lighter.
YG	Garbage lighter.
YH	Ambulance boat.
YHB	Houseboat.
YHT	Heating scow.
YM	Dredge.
YMS	Motor mine sweeper.
YMT	Motor tug.
YN	Net tender.
YNg	Gate vessel.
YNT	Net tender (tug class).
YO	Fuel oil barge.
YOG	Gasoline barge.
YOS	Oil storage barge
YP	District patrol vessel.
YPD	Floating pile driver.
YPK	Pontoon stowage barge.
YR	Floating workshop.
YRC	Submarine rescue chamber.
YRD	Floating pile driver.
YS	Stevedore barge.
YSD	Seaplane wrecking derrick.
YSP	Salvage pontoon.
YSR	Sludge removal barge.
YT	Harbor tug.
YTT	Torpedo testing barge.
YW	Water barge.

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