



# Plan

- Continuing the process of going back to look at some of the things, which were not known at the time, which hopefully should help us understand why things happened as they did.
- I will also spend some time following some of the actors in the story, to see whence they came and where they went.
- Last time we looked at the triumphs and some of the disasters of the Japanese land based bombers.
- This week I want to look at some of the carrier battles.

# 20<sup>th</sup> February - Sea

- O'Hare encountered eight twin engine bombers only a few miles from the ships at 17.05, fortunately he had an altitude advantage of a few thousand feet.
- O'Hare shot two bombers out of formation in his first attack.
- His wingman found that his guns would not fire and pulled clear to try to clear them.
- O'Hare shot down two more of the bombers in his second attack
- then pursued them into the ships' AA barrage to shoot down another before his guns ran out of ammunition while firing at a sixth bomber.



Butch O'Hare in his Wildcat showing a Japanese flag for each of the bombers he claimed

# Butch O'Hare

- Edward "Butch" O'Hare was born in St. Louis, Missouri.
- Butch's father "Easy Eddie O'Hare" was a lawyer who worked closely with Al Capone.
- During Capone's tax evasion trial in 1931 and 1932, O'Hare's father provided incriminating evidence which helped finally put Capone away.
- In 1933 Butch entered the US Naval Academy at Annapolis. He graduated and was appointed an Ensign in 1937.
- In 1939, he started flight training at NAS Pensacola in Florida.
- In November 1939, Butch's father was shot and killed, most likely by Al Capone's gunmen.
- When Butch finished his naval aviation training in May 1940, he was assigned to USS Saratoga with Fighter Squadron Three (VF-3). O'Hare now trained on the Grumman F3F and then graduated to the Brewster F2A Buffalo.



A Grumman F3F-1 0232 fighter of U.S. Navy fighter squadron VF-4 on 1939-01-13 - VF-4 was assigned to the aircraft carrier USS Ranger (CV-4).

# Butch O'Hare

- Lieutenant Thach, then executive officer of VF-3, discovered O'Hare's exceptional flying abilities and closely mentored the promising young pilot. Thach emphasized gunnery in his training. In 1941, more than half of all VF-3 pilots, including O'Hare, earned the "E" for gunnery excellence.
- On January 11, 1942, as Butch and other VF-3 officers ate dinner in the wardroom, the carrier Saratoga was torpedoed by a Japanese submarine while patrolling southwest of Hawaii.
- Saratoga didn't sink but she spent five months in repair on the west coast.
- VF-3 transferred to the USS Lexington on January 31 and the ship sailed for the south Pacific that day.



VF-3: Front row, second from right: Lt. Edward Butch O'Hare.

# Butch O'Hare

- After the New Guinea raid O'Hare, credited with shooting down five bombers, became an ace, was selected for promotion to lieutenant commander, and became the first naval aviator to be awarded the Medal of Honor.
- The Lexington returned to Pearl Harbor for repairs and to have her obsolete 8-inch guns removed, transferring some of her F4F-3 fighters to the Yorktown including "White F-15" that O'Hare had flown during his famous mission.
- The pilot assigned to fly this aircraft to Yorktown was admonished by O'Hare just before take-off to take good care of his plane. Moments later, the fighter failed to take off, rolling down the deck and into the water; the pilot was recovered, but "White F-15" was lost.
- U.S. Navy policy was to use its best combat pilots to train newer pilots, in contrast to the Japanese practice of keeping their best pilots flying combat missions.
- O'Hare was not employed on combat duty from early 1942 until late 1943. Important events in this period included flying an F4F-3A Wildcat as Lt Cmdr Thach's wingman for publicity footage on April 11, 1942, the Medal of Honor presentation at the White House on April 21, and the welcome parade in O'Hare's hometown on Saturday, April 25, 1942.
- After the Medal of Honor ceremony, then-Lieutenant O'Hare was described as "modest, inarticulate, humorous, terribly nice and more than a little embarrassed by the whole thing".



F4F-3A Wildcats flown by LCMDR. Thach (F-1) and Lt. O'Hare (F-13) during the aerial photography flight of April 11, 1942.



# Butch O'Hare

- On June 19, 1942, O'Hare assumed command of VF-3, relieving Lt Cmdr Thach. He was relocated to Maui, Hawaii, to instruct other pilots in combat tactics.
- Equipped with the new Grumman F6F-3 Hellcat the highly successful follow-on to the Wildcat, two-thirds of Butch O'Hare's command, now renumbered VF-6, (twenty-four F6F-3s) embarked on the light carrier USS Independence on August 22, 1943.
- For his actions in battles near Marcus Island on August 31, 1943, O'Hare was awarded the Distinguished Flying Cross.
- For his actions in subsequent missions near Wake Island on October 5, 1943, O'Hare was awarded a Gold Star in lieu of a second Distinguished Flying Cross.
- On September 17, 1943, O'Hare was appointed Commander Air Group (CAG) Six, embarked on the USS Enterprise, commanding the entire Enterprise air group.



A two-plane section of F6F-3 Hellcats in tri-color camouflage scheme, wearing the red-outlined national insignia (January 21, 1943).

# Butch O'Hare

- From 20 – November 23, 1943, U.S. forces landed in the Gilberts (Tarawa and Makin), and the Enterprise joined in providing close air support to the Marines landing on Makin Island.
- Faced with U.S. daylight air superiority, the Japanese developed tactics to send torpedo-armed Mitsubishi G4M Betty bombers on night missions from their bases in the Marianas against the U.S. aircraft carriers.
- In late November they launched these low-altitude strikes almost nightly to get at Enterprise and other American ships, so Admiral Radford, O'Hare and Commander Tom Hamilton, CV-6 Air Officer, were deeply involved in developing counter-tactics, the first carrier-based night fighter operations of the U.S. Navy.
- O'Hare's plan required the Carrier's (FDO) to spot incoming formations at a distance and send a "Bat Team" section consisting of a radar equipped Avenger torpedo bomber and two Hellcat fighters toward the Japanese intruders.



TBF Avenger ready for catapult launch.



# Butch O'Hare

- The radar-equipped Avenger would lead the Hellcats into position behind the incoming bombers, close enough for the F6F pilots to spot the blue exhaust flames of the Japanese bombers. The Hellcats would then close in and shoot down the torpedo-carrying bombers.
- Enterprise introduced this experiment in the co-operative control of Avengers and Hellcats for night fighting, on the night of November 26, 1943. O'Hare volunteered to lead this mission.
- The night fighter unit consisting of 1 VT and 2 VF was catapulted between 17:58 and 18:01.
- The Hellcats had trouble finding the Avenger and the FDO had difficulty guiding any of them on the targets but O'Hare and his wingman in their Hellcats finally got into position behind the Avenger.
- Just then the turret gunner of the TBF noticed a Betty above and almost directly behind O'Hare's 6 o'clock position. He opened fire with the TBF's .50-cal. machine gun in the dorsal turret and a Japanese gunner fired back. Butch O'Hare's F6F Hellcat apparently was caught in a crossfire. Butch's F6F slid out of formation to port, pushing slightly ahead at about 160 knots and vanished in the dark.



O'Hare as Air Group Six Commander in the cockpit of a Grumman F6F-3 (1943).

# Butch O'Hare

- After dawn, a three-plane search was made, but no trace of O'Hare or his aircraft was found.
- On November 29 a PBY Catalina flying boat also conducted a search with no positive result, and O'Hare was reported missing in action.
- On September 19, 1949, the Chicago-area Orchard Depot Airport was renamed O'Hare International Airport.
- An F4F Wildcat in a livery identical to the aircraft flown by O'Hare, ("White F-15") is currently on display in Terminal 2.
- The display was formally opened on 20 February 2017 on the Seventy-fifth anniversary of his Medal of Honor flight.



Note the carrier deck of the Butch O'Hare Exhibit—  
photo by Joseph May/Travel for Aircraft

# 25<sup>th</sup> March

- **Sea**
- On 25th March the Admiralty regretted a further delay in sending her (Hermes) "as she has to take part in a special operation".
  - Subsequently, after discussions between the Admiralty and Admirals Leary and Royle, it was agreed that she could be better employed with the Eastern Fleet and should remain in the Indian Ocean.
- Analysis of Japanese signals traffic suggested that MO was the designator for Port Moresby.
- **Air**
- **Port Moresby**  
(Raid 19) Heavy cloud but small Japanese force of 3 bombers, 4 fighters came over at 9:30am at extreme height. Our fighters were in the air but could not find the Japs in the clouds. The bombers dropped their bombs hurriedly when the AA opened up and all bombs fell harmlessly in the harbor.
- Several B-26's belonging to the 22<sup>nd</sup> Group (M) flew the Pacific to land at Archerfield on 25 March, and within a month a total of forty-eight of the Marauders had come in from the United States.



Prewar picture of Hermes

# 22 April - Intelligence

- **Pacific**

- The vast quantity of signal traffic intercepted during the three days that the Japanese were on their wild goose chase after Halsey's carriers was a bonanza for the US Navy's codebreakers.
- Since the war began they had been battling day and night to penetrate the five digit groups of the Japanese Navy's main operational code, labelled JN25.
- There were code breaking groups in Washington (NEGAT), Pearl Harbour (HYPO) and CAST originally at Coregidor in the Philippines, now in Melbourne and renamed Belconnen and later FRUMEL.
- JN 25 was a traditional cypher generated from two code books, a dictionary containing 45,000 five digit groups each ascribed to a word or phrase and a book of random five digit groups.
  - The message was converted into code from the dictionary
  - then a range of successive groups from the second book were added to the coded message.
  - All the five digit groups in both books were divisible by three to make it easy to check for garbles.
  - The transmitted message was prefixed by a key that identified the page, column and line that the recipient had to look up in the second book to lay bare the coded message.



# 22 April - Intelligence

- **Pacific**
- The Pearl Harbour codebreakers were led by Lt Cdr Rochefort, who had studied the Japanese language and Japanese naval operations for years and was blessed with a superb memory for detail.
  - He was assisted by eight hand picked cryptanalysts and
  - the dispossessed musicians of the battleship California's band.
  - They worked amid the ceaseless clatter of tabulating machines and teleprinters in a windowless basement below Pearl Harbour's new administrative building.
  - Lack of windows and the air conditioned environment eliminated any sense of night or day.
- Rochefort often stayed in the chamber for days at a time working in carpet slippers and a stained red velvet smoking jacket and sleeping on a cot between the IBM machines.
- Lt Cdr Layton, the fleet intelligence officer assembled
  - Rochefort's team's results,
  - analysis of the quantity and origination of signal traffic and
  - reports of reconnaissance and combat
  - to produce the daily CinCPac Intelligence Bulletin, transmitted in code to all ships and bases.

# 24 April

- **Pacific**

- By 24<sup>th</sup> the NEGAT team had deciphered orders sent to the 4<sup>th</sup> fleet commander, revealing that operation MO would begin when the two carriers detached from the strike force, returning from the Indian Ocean, reached Truk.

- **New Guinea**

- From the Markham the N.G.V.R. reported on 24th April that a Japanese outpost had been established at Heath's Plantation and, a little later, that a small gun had been sited there facing north-west along the road.

- **Port Moresby**

- April 24, 1942 In the morning, twelve Zeros attack Port Moresby, six dog fighting with RAAF 75 Squadron P-40 Kittyhawks and six attacking other aircraft and bombers. They destroyed two B-26s and a PBY moored in Fairfax Harbor. Three P-40E Kittyhawks from 75 Squadron were shot down: Channon, KIA and Les Jackson and Crawford, survived.

- **Burma**

- On 24th April the AVG in a stealthily executed raid by Kittyhawks on Chiengmai, a strong Japanese base just across the Thai border, the American pilots believed that they destroyed at least 30 aircraft just as they were preparing to take off, besides wrecking barracks and hangars and leaving fuel stores blazing, but the raid cost the A.V.G. two of its best flight leaders.

# 28 April - Sea

- **Pacific**

- On 28 April Nimitz flew back to Pearl after conferring with King in San Francisco.
- CominCh shared Nimitz's concern about the South Pacific and ordered CinCPac to keep at least two carriers there until further notice.

- **Intelligence**

- On the 28<sup>th</sup> a message was decoded, which stated "The objective of MO will be first to restrict the enemy fleet movements and will be accomplished by means of attacks along the North coast of Australia".

# 3 May

- **Corregidor**
- On 3<sup>rd</sup> May General Wainwright reports continuous and intense bombardment and artillery fire against Corregidor.
- **Intelligence**
- During the first three days in May most of the Japanese orders for operation MO were deciphered, such as the one that began:
  - “If the enemy striking force is determined to be in -----, the MO striking force will pass (north northeast?) of RX thence south; at 06.00 on 5 May . . . .



Japanese artillery in action against Corregidor

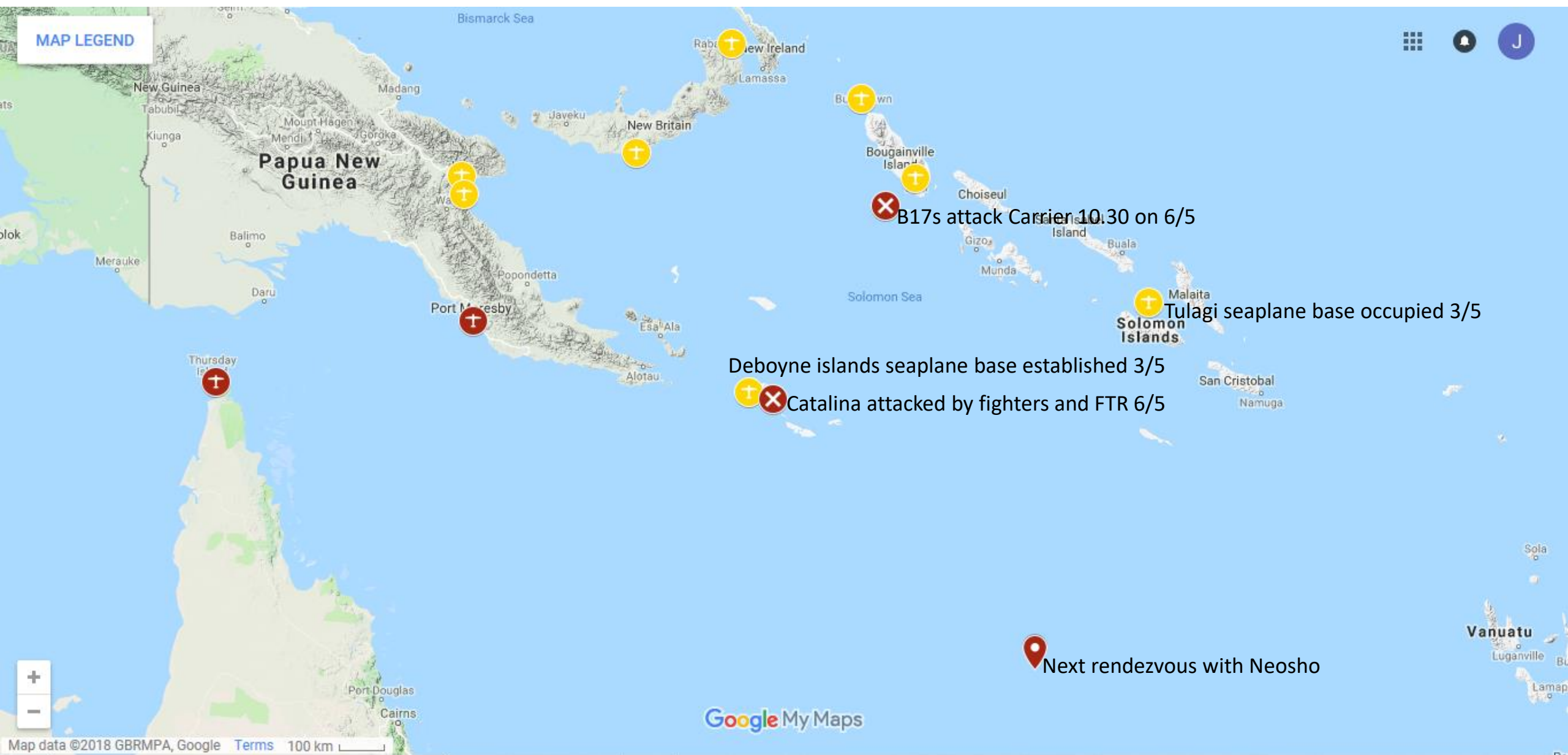


# Situation report – 7 May 1942

- Admiral Fletcher has been briefed to expect a landing at Port Moresby on 10 May and an attack on it by carrier aircraft on 7 or 8 May.
- He expected the enemy to have three carriers, two of which, Shokaku and Zuikaku, were among the best the Japanese had.
- His task force 17 consists of:
  - the carriers Yorktown and Lexington,
  - six heavy cruisers,
  - one light cruiser
  - eleven destroyers and
  - the oiler Neosho.
- Fletcher fuelled his taskforce from Neosho until dark on the sixth then detached the oiler, escorted by the destroyer Sims, to head south, out of the way, to the next fuelling rendezvous at 16 south 158 east.
- He then turned north west to be within striking distance of a Port Moresby invasion force by first light on May 7.



Admiral Frank Jack Fletcher



# 7 & 8 May – Coral Sea

- On 7 May, both sides launched airstrikes. Each mistakenly believed they were attacking their opponent's fleet carriers, but were actually attacking other units, with the US sinking the Japanese light carrier Shōhō and the Japanese sinking a US destroyer and heavily damaging a fleet oiler, which was later scuttled.
- The next day, each side found and attacked the other's fleet carriers, with the Japanese fleet carrier Shōkaku damaged, the US fleet carrier Lexington critically damaged and later scuttled, and Yorktown damaged.
- With both sides having suffered heavy losses in aircraft and carriers damaged or sunk, the two forces disengaged and retired from the area.
- Because of the loss of carrier air cover, the Japanese recalled the Port Moresby invasion fleet with the intention of trying again later.



# 20 May

- **Sea**
- A long signal from the Combined Fleet flagship to all units, intercepted on 20 May, contained so many references to AF that it was clearly the operational order for a battle.
- In an attempt to obtain a definitive identification of AF, Rochefort instructed Midway, by submarine cable, to make a radio call in plain English stating that the island's water distillation plant had broken down.
- To maintain the deception 14<sup>th</sup> Naval District at Pearl signalled back that a water barge was on its way with emergency supplies.



Commander Joseph Rochefort



# 21 May

- **Sea**
- The Japanese radio station on Wake Island reported that AF was apparently running short of water and orders were issued for the invasion force to take on board extra supplies.
- At a CinCPac staff briefing Cmdr Layton was able to give an outline of the Japanese plan.
- Operation AL was to attack the western Aleutian Islands supported by a two carrier force after raiding American bases in Alaska.
- Operation AR required the main Japanese carrier force to strike at Midway in preparation for an invasion force setting out from Saipan covered by battleships and cruisers.
- It was thought probable that enemy submarines would patrol off Hawaii to give early warning of US fleet movements.
- Precise times and dates were still missing because they had been transmitted in a new five digit code for extra security.
- Certain important officers, both at Honolulu and in Washington, believed that these indications were an elaborate hoax to cover another raid on Pearl Harbour or even on the West Coast.
- Admiral Nimitz accepted the estimate of his fleet intelligence officer that Midway and the Aleutians were the real Japanese objectives.

# 24 May - Intelligence

- The date and time of the attack on Midway remained obscure in the special code. The American code breakers had not wanted to waste time trying to figure it out. Then Lt Cmdr Wesley Wright took a crack at it after already putting in his regular 12 hour shift.
- As the night wore on Wright worked it out. The date and time cipher comprised a polyalphabetic with independent mixed cipher alphabets and with the exterior plain and key alphabets in two different systems of Japanese writing. Each has 47 syllables making the polyalphabetic tableau a gigantic one of 2,209 cells, more than three times as extensive as the ordinary Vigenere tableau of 676 cells. Nevertheless by 5.30 am he had a solution.
- The Aleutians would be attacked on 3 June and Midway on 4 June.
- This tied in with the calculations of the CinCPac intelligence staff allowing Cdr Layton to predict:
  - **“They will come in from the northwest on a bearing 325 degrees and will be sighted about 175 miles from Midway about 06.00.”**
- The Japanese had a new codebook which came into use on 24 May, but the important breaks had already been made.

# 30 May – Pearl Harbor

- It was estimated that Yorktown, damaged at the Coral Sea, would require several months of repairs in the United States.
- Yorktown arrived at Pearl Harbor on 27 May, entering dry dock the following day. The Pearl Harbor Naval Shipyard worked around the clock, and in 72 hours she was restored to a battle-ready state, judged good enough for two or three weeks of operations, as Nimitz required.
- Yorktown sailed for Midway as the core of TF 17 on 30 May. Repairs continued as she sortied, with work crews from the repair ship USS Vestal still aboard.



USS Yorktown in dry dock at Pearl Harbor days before the battle.

# 4 June - Midway

- During the night four PBY's moved toward the transports, found them by radar at 01:30 on the 4th, put one torpedo into a tanker and strafed the column of transports, causing some casualties. The attack temporarily slowed the oiler.
- At **04.31** Yorktown launched 10 SBDs to search the northern semicircle to a distance of 100 miles and 6 Wildcats of the day's first Combat Air Patrol.
  - The light south easterly breeze meant that the carriers had to steam at high speed on a south easterly course to conduct flight operations, increasing the distance from the enemy.
  - If the enemy was to the north west of Midway as expected he could conduct air operation while still steaming towards the island.
- On the 4th of June PBY's were off early on their searches for the main enemy force, which had not yet been located; B-17's were in the air; B-26's, TBF's, and MAG-22 planes were warmed and ready.
- At **05.45** a patrol plane sighted many planes heading for Midway at a point 150 miles to the north and west.
- Seven minutes later at **05.52**, PBYs sight the enemy's carrier force and broadcast a warning,
  - "Two carriers and battleships, bearing 320 degrees, distance 180, course 135, speed 25."
  - The warning was picked up by the American carriers.
- Nimitz, monitoring the reports at Pearl Harbour, reckoned that Commander Layton's 24<sup>th</sup> May forecast of where and when the enemy would be sighted was 5 degrees, 5 miles and 5 minutes out.



# 4 June - Midway

- Midway was ready.
- The four B-26s led by Capt. Collins, and the six TBF's were off to attack the carriers,
- and the flight of 14 B- 17's already in the air and on its way toward the transports was diverted north against the carriers.
- At **05.55** the 6th Defense Battalion radar logged a report of "many planes," and the Naval Air Station raised similar blips almost simultaneously.
- Air raid sirens began to wail, Condition One was set, and the MAG-22 pilots manned their planes.
- Both squadrons were in the air in less than 10 minutes, VMF-221 heading to intercept the enemy planes
- and VMSB-241 off to rendezvous station 20 miles east where the dive bomber pilots would receive further instructions.



Midway Atoll, Eastern Island is in the foreground, and the larger Sand Island in the background to the west.

# 4 June - Midway

- The reported position was a good one from which to conduct an air strike on Midway.
- At 06.07 Fletcher instructed Spruance, with his two carriers, to "proceed south-westerly and attack enemy carriers when definitely located. I will follow as soon as planes recovered".
- Yorktown had a search mission in the air and held its north easterly course to recover the morning search. Fletcher was concerned that only two carriers had been sighted and held the Yorktown's strike force back in case the Midway search found more carriers.
- The Marine fighters under Major Parks sighted the Zero-escorted dive bombers at 06.16 about 30 miles out from Midway, and Captain Carey, leading one division in a Wildcat, launched the attack from 17,000 feet.
  - The Marine fliers were outnumbered, and they found that the Zero fighters could "fly rings around them."
  - They had time for only one pass at the bombers, and then had to turn their attention to the swarm of Zeros.
  - Only three of the original 12 Marine pilots survived this brawl. It is believed that they splashed a number of the bombers and some of the Zeros.
- Another group of 13 Midway fighters under Captain Armistead came in for an attack against the enemy air formation.
  - Damage inflicted upon the enemy was undetermined, but
  - fewer Marine pilots were lost.
  - The fighter defense of Midway had been expended, and the problem now passed to the antiaircraft guns on the atoll.

# 4 June - Midway

- The first bomb fell on the island about **06.30**. Twenty minutes later the attack was over. It did heavy damage to installations and to the defending aircraft and caused many casualties.
- But aerodrome runways remained usable.
- American estimates were that "at least one third of the attack group never returned" but seventeen American aircraft were shot down.
- Thick black smoke from oil fires billowed up from the islands, and ruptured fuel lines left more than two-thirds of the aviation fuel temporarily unavailable.
- The Marine ground defense force had sustained 24 casualties, and four ordnancemen of VMF-221 had been lost to a direct bomb hit.
- Only two Marine fighters remained airworthy.



CAMOUFLAGED LOOKOUT TOWER AT SAND ISLAND stands amidst the damage caused by Japanese dive bombers which attacked Midway Atoll on 4 June 1942. (USN 17057)



# 4 June - Midway

- Spruance steamed south west to attack the enemy carriers. He intended to hold his planes until he was within 100 miles of the Japanese.
- But when he heard of the strike on Midway, Spruance decided to launch two hours earlier, hoping to catch the Japanese planes back on their carriers rearming for a second attack of the atoll.
- At **06.38** Enterprise signalled to Hornet to launch at 07.00. and send each carrier's air group off in a single formation.
- Captain Mitscher of Hornet convened a quick conference with Commander Ring (CHAG) and the four squadron commanders. They decided to send the Air Group out on 265 degrees.
- At **06.56** The carriers swung to port and steadied up at 28 knots into the gentle south easterly breeze.
- Enterprise and Hornet began launching at about **0700**. The enemy carriers were thought to bear 239 or 240 degrees, distant 155 miles.



Devastators of VT-6 aboard USS *Enterprise* being prepared for take off

# 4 June - Midway

- At **07.05** the B-26s and TBFs sighted the carriers with their supporting heavy ships;
  - they attacked through heavy fighter defense and flak with no fighter support,
  - losing two of the B-26's and five of the new Grumman torpedo planes.
  - Lt. Muri and Captain Collins brought their badly shot-up B26s home to Midway after their attack,
  - but they had scored no hits, nor had the TBFs.
- Henderson's group of 16 SBD-2s climbed to 9,000 feet to locate the enemy carriers, which were then being attacked by the TBFs and the B-26s.
- Flyers of this group sighted the Japanese ships at **07.44**. As the SBDs spiralled down they were set upon by swarms of Zeros flying air cover, which were soon reinforced by more fighters from the carriers below.
- Henderson and several others were shot down (only eight of these planes got. back to Midway) and the strike scored no hits although some were claimed.



# 4 June - Midway

- On board Enterprise the launch of the second deckload of fighters and torpedo aircraft was taking an inexplicably long time.
- Hornet had all her planes aloft while Enterprises second deckload were still on board.
- Spruance judged that the need to throw something at the enemy as soon as possible was greater than the need to coordinate the attack by aircraft of different types and speeds, since neutralizing enemy carriers was the key to the survival of his own task force.
- At **07.45** Enterprise blinkered to McClusky, the Air Group Commander, "Proceed on mission assigned."
- At **07.46** as soon as the last of the torpedo squadron had launched and formed up Ring signalled for the Hornet group to depart.
  - They headed out on the briefed heading of 265 degrees with the dive bombers and fighters climbing to 19,000 feet and Waldron's TBDs cruising at 1,500 feet.
  - Keeping in visual contact because the SBD's rate of advance while climbing was no faster than the TBDs.



Waldron's TBD Devastator taking off from USS Hornet on 4 June 1942.

# 4 June - Midway

- McClusky had carefully plotted his own estimate of where the enemy carriers would be found and come up with a bearing of 231 degrees, distance 142 miles.
- In response to the blinkered order he rounded up his SBDs and departed on 231 degrees at 07.52.
- Fighting Six, Enterprise's fighter squadron had not been briefed on the change in plan.
  - By the time Gray, the skipper, had them formed up, the SBDs, which he was assigned to escort, were out of sight.
  - Gray spotted below a torpedo squadron heading out and moved overhead to cover them while climbing to his assigned altitude.
  - Unbeknownst to Gray the torpedo squadron he was following was not Enterprise's Torpedo Six, with whom he had arranged a contingency plan and communications system but Waldron's Torpedo Eight from Hornet.



C. Wade McClusky, Commander  
Enterprise Air Group

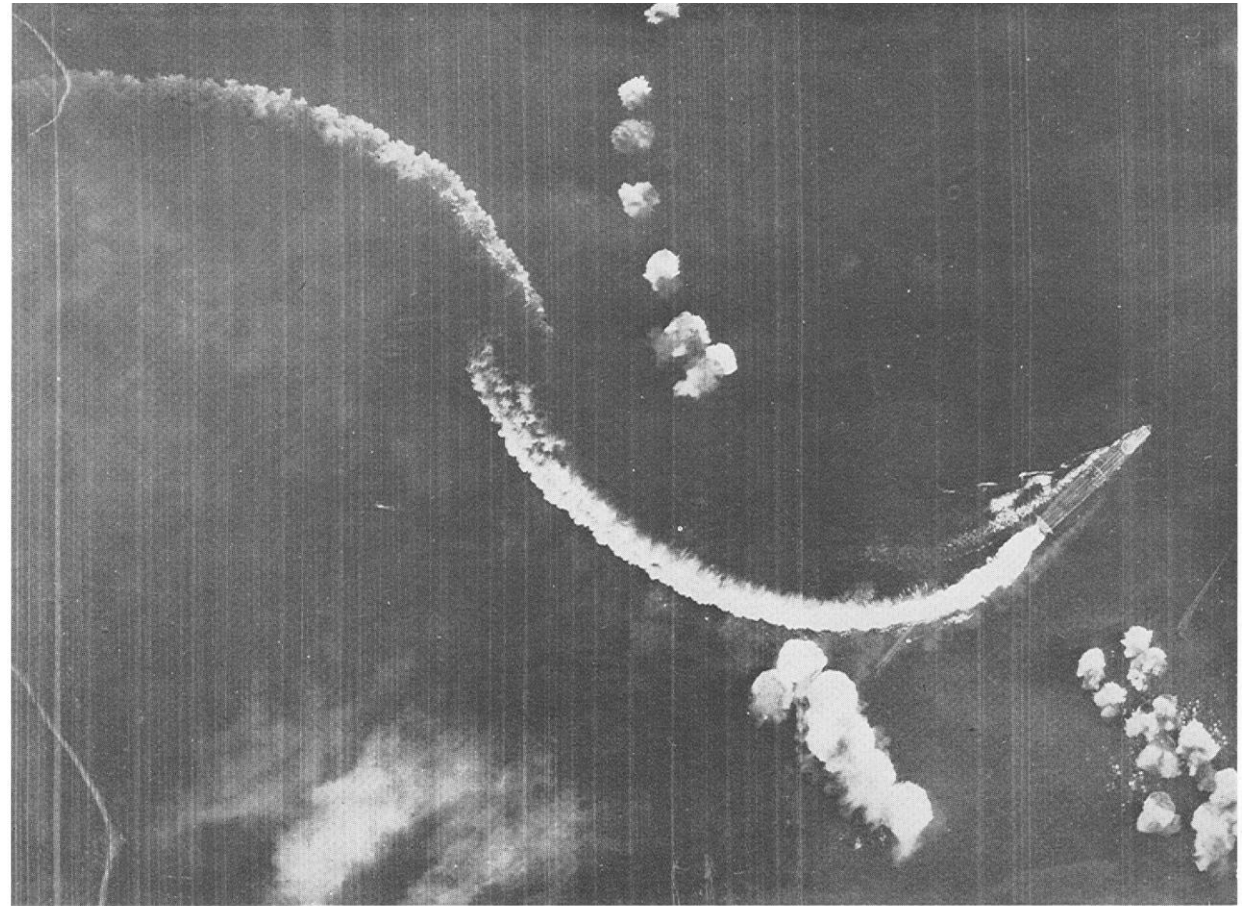
# 4 June - Midway

- Enterprise's Torpedo Six was the last squadron to take off from Task Force 16.
  - The Skipper, Lt Cdr Lindsey, had sustained serious face and chest injuries on the 28<sup>th</sup> May, when his TBD stalled just before landing and hit the water.
  - The battered Lindsey refused to be left behind but had to be helped into his cockpit.
  - The VT-6 TBDs took to the air around 08.00 and made a running rendezvous while departing on a bearing of 240 degrees.
- By now Spruance had launched 116 aircraft—29 torpedo bombers, 67 dive bombers, and 20 fighters—from Hornet and Enterprise. At 08.06 he brought his ships round to 240 degrees to charge towards the enemy at 25 knots.
- At 08.15 Enterprise radar detected a bogey bearing 170 degrees 30 miles out.
  - Almost simultaneously the heavy cruiser Northampton eyeballed the intruder, 185 degrees 30 miles out.
  - The FDO attempted to guide the CAP to intercept but scattered cloud and the confusion caused by giving directions using true rather than magnetic bearings saved the snoopers.



# 4 June - Midway

- The 15 B-17s led by Lieutenant Colonel Sweeney now attacked the Japanese carriers, bombing from 20,000 feet, but again claims of hits were optimistic.
- As these Flying Fortresses pulled away around 08.20, Major Norris came in with his 11 Vindicators which had taken off with Henderson.
- Beset by the Zeros, Norris turned to the closest target and the Marines crowded their ancient planes into a standard glide run almost on top of the Japanese battleship *Haruna* but the attack managed no hits.
- Three Marines were shot down, and the group was credited with splashing two enemy fighters, plus two probables.



JAPANESE CARRIER UNDER ATTACK BY B-17'S, 4 JUNE 1942

# 4 June - Midway

- The US Submarine Nautilus had intercepted the search plane contact report and promptly headed north looking for trouble.
- At **08.00** she found it in the form of a depth charge attack.
- Commander Brockman, the skipper, managed to come up for a look see at **08.20** and found himself surrounded by ships moving at high speed and aiming everything they had, including a battleship's main battery, at his periscope.
- At **08.25** he fired one torpedo at the battleship at a range of 4,500 yards.
  - It missed and
  - he submerged to 150 feet as the depth charge attack began.



US Submarine Nautilus



# 4 June - Midway

- *Yorktown* held back its planes for about two hours;
  - Fletcher considered that his aircraft might be needed against other enemy carriers not yet located, but
  - by **08.38** there had been no further enemy sightings, and he had heard on the fighter direction circuit that Task Force 16 had been spotted by the Japanese
  - so he decided to launch half his dive bombers and all his torpedo planes, along with escorting fighters.
- By shortly after **09.00** the *Yorktown* had 17 SBDs, 12 TBDs, and six F4F-4s in the air, briefed to fly 150 miles on a bearing of 240 degrees then turn north west if the enemy had not been found.
- Fighters, to relieve the CAP, and another squadron of dive bombers were spotted on *Yorktown*'s deck ready for take off to deal with contingencies.



*Yorktown* on the morning of 4 June 1942.

# 4 June - Midway

- Commander Ring led the Hornet strike out on a heading of 265 degrees with the 34 SBDs in a scouting line abreast to increase the area searched.
- After about half an hour Waldron, leading VT-8, in flagrant disregard of orders, broke formation from Ring, swung round to the left and followed a more south westerly heading.
  - Gray and his Wildcats above at 20,000 feet continued to follow Waldron. Waldron had the fighter support he wanted but didn't know it was there.
  - Soon after 09.00 Gray noticed a bank of low cloud ahead of the TBDs then watched them disappear under the whitish mass.
  - Gray never saw them again.
- Then about 09.10 Jack Kelly, leader of Gray's second division radioed "there they are at one o'clock down, skipper."
  - Gray saw ship wakes far off and headed for them, searching for McClusky's dive bombers and Japanese fighters.
- The 10 Wildcat pilots from *Hornet* following Ring, who had been the first planes launched from Hornet, after nearly two hours aloft, found their fuel gauges below half full.
  - Not long after 09.00 Ensign McNerny did something highly unprecedented for a junior pilot. Easing past his section leader, John Magda, he flew up beside the Squadron's CO, Lt Cdr Mitchell, and pointed animatedly to the fuel gauge.
  - Mitchell waved him back into his proper slot in the formation. McNerny dropped back but only for a few minutes.
  - Soon he was back next to the skipper.
  - Mitchell violently gestured for him to get back but McNerny had had enough.
  - He swung round in a wide turn to head away to the east. Magda, his section leader, followed him.
  - Mitchell then gathered the other eight Wildcats turned and headed back east after McNerny and Magda.
  - When they left Ring and the dive bombers they were around 155 miles from their point of departure. They headed back for the task force guided by Zed Baker with throttles set for maximum range.
- At 09.25 Yorktown launched a relief CAP, recovered the first CAP then turned onto 225 degrees at 25 knots towards Task Force 16 then about 15 miles south west.

# 4 June - Midway

- Waldron's squadron sighted the enemy carriers and began their attack at 09:20.
- Flying at 100 feet and 100 knots, the requirement for launching torpedoes, and without fighter escort, all 15 TBD Devastators of VT-8 were shot down without being able to inflict any damage.
- For a plane to splash while flying at 100 mph so close to the water was like hitting a stone wall.
- Ensign George Gay, was the only survivor of the 30 aircrew of VT-8.
  - Gay pulled the torpedo release 800 yards from a carrier and pulled out ten feet above the carrier's deck, then his left rudder pedal was knocked out by a cannon shell and the plane splashed.
  - His radio man was already dead.
  - Gay, only slightly wounded, managed to reach the surface as the plane sank, and hid under a floating rubber seat cushion to escape the notice of strafing Zeros.
- Gray found neither dive bombers nor Zeros at altitude and could not see any of the TBDs. He tried to contact McClusky but heard only static. He decide to remain at altitude and circled over the enemy fleet.



# 4 June - Midway

- Lindsey's VT-6 from *Enterprise*, last to take off, after the dive bombers and fighters had departed, headed out on 240 degrees and sighted smoke about 30 miles to the north west not long after 09.30.
  - Lindsey turned towards and aimed for the nearest flat top but the rate of closing was agonisingly slow – TBDs doing 100 knots chasing ships doing 30 knots.
  - At 09.40 a cruiser opened fire with its main armament to direct the Zeros of the CAP towards the TBDs.
- Wade McClusky, Enterprise Air Group Commander, leading the two enterprise dive bomber squadrons, reached the area he expected to find the enemy and found only open ocean.
  - He continued on the same course for another 35 miles, passing the safe limit of fuel endurance,
  - then at 09.35 he turned northwards to continue the search.
- Ring kept on going west with the SBDs without finding any trace of the enemy until about 09.40 when he turned south for a few minutes and then turned back east.
  - About this time the group broke up and Ring found himself alone.
- Ring and the 15 SBDs of Scouting Eight separately set course back to the task force guided by Zed Baker.
- The 18 SBDs of Bombing Eight searched south east then split up.
  - Four headed back to the task force and reached base on Hornet.
  - Fourteen headed towards Midway Island.
  - Eleven eventually reached the island, the other three ran out of gas and ditched.

# 4 June - Midway

- At **09.55** McClusky spotted the wake of a destroyer going north east and throwing spray.
  - Assuming she was steaming to rejoin the Japanese carriers McClusky took his course from her.
- Above, Gray's fighters could not see or hear any indication that VT-6 was attacking.
  - They never heard the distress call: "Come on down, Jim."
  - At **09.56** Gray radioed base: "This is Gray. We are over six destroyers, two battleships, two carriers." This was the first contact report that task force 16 had been able to copy.
- While Gray circled, VT-6 braved the fierce fighter defence.
  - Both Lindsey and Ely radioed for fighter support but Gray and his pilots never heard them.
  - The Japanese combat air patrol Zeros made short work of the unescorted, slow, under-armed TBDs.
  - One after another the Devastators hit the sea.
  - Both Lindsey and Ely went down at the head of their men.
  - After **09.58** five or six of the TBDs launched their fish but the attack angles were poor because of adroit Japanese ship handling.
  - Five of the TBDs got clear of the Japanese, the other nine had splashed.
  - One of the survivors later ditched.
  - A few TBDs had managed to get within a few ship-lengths range of their targets before dropping their torpedoes—close enough to be able to strafe the enemy ships and force the Japanese carriers to make sharp evasive maneuvers—but all of their torpedoes either missed or failed to explode.
- At **10.00** Gray radioed again: "This is Gray. We are returning . . .due to lack of gas. We have been flying over the enemy fleet. They have no combat air patrol. . . . Course about north."
- Like the fighter pilots at the Coral Sea he had let the strike planes do the navigating while he watched for zeros. Now he needed the Zed Baker signal to get home and needed to stay high to receive it.



# 4 June - Midway

- Almost exactly according to plan the Yorktown air group closed up during its flight.
- The six Wildcats had caught up with the TBDs they were to escort and
- the dive bomber squadron despite climbing to 15,000 feet were also in sight of the TBDs.
- About half an hour into the flight Max Leslie, the CO of Bombing Three, threw the switch to electrically arm his bomb and was appalled to feel his SBD lurch as the bomb dropped free.
  - Three other pilots also dropped their bombs before the skipper could warn them and tell them to arm their bombs manually.

# 4 June - Midway

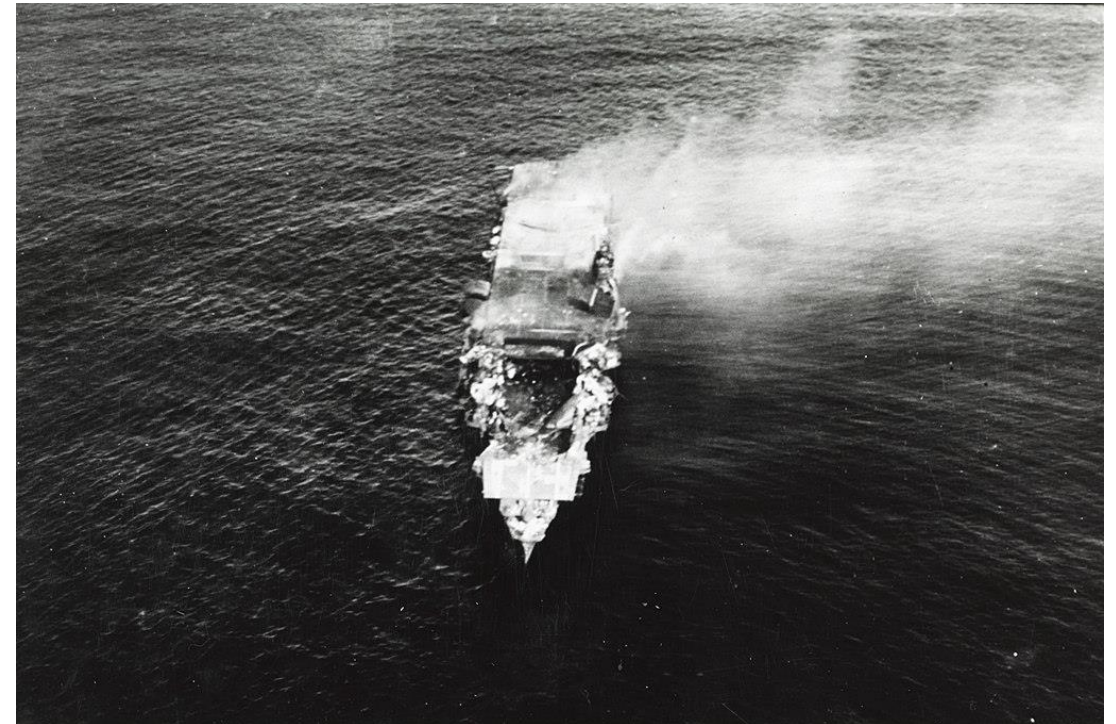
- A few minutes after 10.00 Mitchell's group of Hornet fighters sighted some ship wakes far off to the north.
  - They identified the ships as Japanese and held to their south easterly heading.
  - Not long afterwards the first Wildcat ran out of fuel, slowed, stalled and headed down. The others were still too high to see what happened when it splashed.
- McInerny and Magda, ahead and to the south of the other group, were the next to go.
  - When the fuel gauges showed only a few minutes left they conferred by hand signals and decided to ditch while they still had power. After carefully judging wind and wave conditions they set down not far apart.
  - Leaping out both secured their life rafts from the dorsal fairings.
  - McInerny inflated his liferaft and stepped in only to find that he had forgotten to cut the lanyard that secured it to the sinking wildcat. Both he and the life raft were under water before he managed to break it free. Popping back to the surface he paddled over to join Magda's raft.
- The next to go was Jennings, whose engine quit. Tallman, his wing man, still had power but followed his leader and ditched beside him.
  - Both had time to pop their rubber boats and bring them together. Two more dots on a vast and lonely sea.
  - Furious at the whole situation, Tallman spent the next two hours scribbling his report on the rough fabric of his raft.
- Kelly then ran out of fuel and turned to glide on a reverse course. Talbot followed him down. Kelly's Wildcat ploughed into the waves and sank immediately.
  - Talbot ditched not far away at about 10.30 but escaped the cockpit and launched his raft.
- When the next man ran out of fuel the last two followed him down and all ditched together.
  - Mitchell found his Wildcat sinking beneath him and was lucky to escape. Raftless he bobbed on the sea supported only by his yellow life jacket.
  - Ruehlow gashed his head painfully on the gunsight when ditching but scrambled free and secured his life raft and
  - Dick Gray secured both his raft and his emergency rations. Ruehlow and Gray brought their rafts together and picked up the skipper.

# 4 June - Midway

- At **10.03** Lloyd Childers the rear seat man in Harry Corl's TBD thought he saw a column of smoke.
  - Corl signalled Massey and the skipper brought VT-3 round to a heading of 345 degrees to approach the ships. Thach with the Wildcat escort and Leslie, high above with the dive bombers followed and also sighted the enemy.
- At **10.10**, with the TBDs about 14 miles from the nearest carrier, a cruiser in the outer screen opened up with her main battery to alert the Japanese fighters to the new threat.
  - Fighters chasing the remnants of torpedo Six broke off the pursuit to resist the new threat and the carriers began turning north west away from the new wave of Americans.
  - Zeros converged from several locations, most initially attacked the Wildcat escort but there were enough Zeros to pursue VT-3 as well.
- Edgar Basset, a veteran with two confirmed kills at the Coral Sea, the last man in the four Wildcats of the higher escort formation was shot down almost immediately.
  - Basset did not bail out and Thach saw the Wildcat erupt in flames before it hit the sea.
  - The Zeros kept the rest of the escort fully occupied during the approach of VT-3.
  - Thach with the high group claimed three Zeros shot down and Cheek and Sheedy, the close escort, claimed one each but they could not free themselves from the Zeros to go looking for the TBDs.
- More Zeros pursued VT-3. Massey bore in against the carriers and another slaughter ensued. Seven Devastators including Massey's fell in flames.
  - Only five were able to launch torpedoes and three of these were then shot down.
  - Again, no hits.

# 4 June - Midway

- For thirty minutes the Japanese carriers had been manoeuvring to avoid attack by the torpedo bombers.
  - This prevented launching additional fighters to strengthen the CAP.
  - The fighters in the air had been pulled down to low level to attack the torpedo bombers,
  - many must have been low on fuel or ammunition and they had suffered some losses to the Wildcat escorts.
- Immediately after VT-3's attack, three squadrons of SBDs arrived simultaneously. McClusky's squadrons from *Enterprise* from the south west and *Yorktown*'s from the northeast.
- The two squadrons from *Enterprise* (VB-6 and VS-6) were running low on fuel because of the time spent looking for the enemy.
- At **10:22**, *Enterprise*'s squadrons split up and attacked the two Japanese carriers on the south west of the formation, diving at 70 degrees at about 280 knots. There was no interference from Zeros and little from anti-aircraft guns.
- McClusky and Scouting Six attacked the southernmost carrier, it sustained four or five direct hits, which caused heavy damage and started multiple fires.



# 4 June - Midway

- Lieutenant Clarence Dickinson, part of McClusky's group, reported:
  - “We were coming down in all directions on the port side of the carrier ... I recognized her as the Kaga; and she was enormous ... The target was utterly satisfying ... I saw a bomb hit just behind where I was aiming ... I saw the deck rippling and curling back in all directions exposing a great section of the hangar below ... I saw [my] 500-pound bomb hit right abreast of the [carrier's] island. The two 100-pound bombs struck in the forward area of the parked planes”
- A miscommunication caused both of the squadrons to dive at the Kaga. Recognizing the error, Lieutenant Best and five others from Bombing Six were able to pull out of their dives and, after judging that Kaga was doomed, headed north to attack Akagi, the westernmost carrier.
- At 10.26 only two minutes after she evaded the last of the torpedo bombers Akagi received two direct hits with 1,000 pound bombs.
  - One started fires among the aircraft on deck,
  - the other penetrated the flight deck and exploded among armed and fuelled aircraft in the hangar.
- Simultaneously, Yorktown's VB-3, commanded by Max Leslie, went for the most easterly carrier. Some of Leslie's bombers did not have bombs after the bomb arming accident.
  - Leslie and the others still dove, strafing carrier decks and providing cover for those who had bombs.
  - VB-3 scored at least three hits and ignited fires creating an inferno.
- Within six minutes, Sōryū and Kaga were ablaze from stem to stern, as fires spread through the ships. Akagi, struck by only two bombs, took longer to burn, but the resulting fires quickly expanded and soon she too was being consumed by flames.

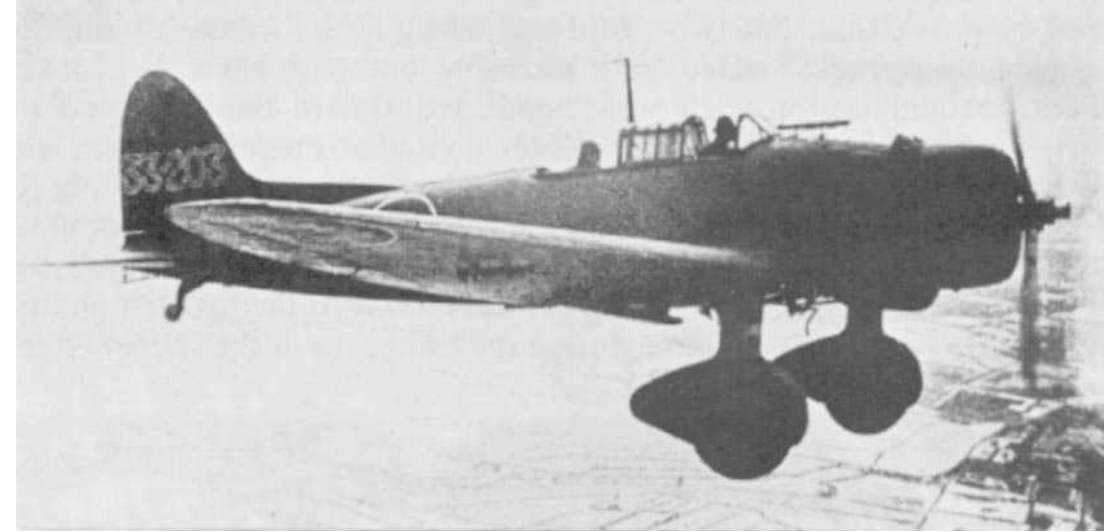


# 4 June - Midway

- The dive bombers were harassed by Zeros on their way out of the area and a number were lost for lack of fuel.
- Fletcher decided to use his reserve squadron of SBDs for search, to locate the remaining flat tops or at least clarify the situation, rather than launching another strike.
  - At 11.33 Task force 17 turned into the wind and sent off ten SBDs to search in pairs 200 miles to the north and north west.
  - The seven remaining SBDs were struck below, fuelled and armed, as a reserve strike force.
  - The twelve wildcats which had been held back to escort the second strike were then released to reinforce the CAP.
  - As the strike force were beginning to straggle back to the Yorktown Captain Buckmaster decided to launch those Wildcats now to clear the deck to recover the strike force. The existing CAP could be recovered with the strike force.
- Just before noon three Japanese carriers out of four were out of action and apparently in sinking condition. All three American carriers were undamaged but they had lost 37 torpedo bombers, 16 dive bombers and 15 Wildcats and 11 Hornet dive bombers were stuck on Midway island by its limited refuelling capacity.

# 4 June - Midway

- At **11.55** Yorktown's radar had a contact and the FDO was sending out divisions of the CAP to investigate a contact bearing 255 degrees distant 20 to 25 miles.
- The returning strike were waved away, fuel lines were drained and filled with CO<sub>2</sub>, Yorktown bent on 30.5 knots and maneuvered violently
- Despite being caught at low altitude having just taken off and not having time to form up in Divisions, the Wildcat pilots of the CAP, part of Thach's Fighting Three, guided by Yorktown's FDO Pederson, did themselves proud.
  - They disrupted the attackers' formations and prevented more than half the eighteen dive bombers from attacking the ship by shooting them down or forcing them to jettison their bombs
  - But seven did get through to attack the Yorktown.



The Aichi D3A Type 99 Dive Bomber (Allied reporting name "Val")

# 4 June - Midway

- At **12.09** Yorktown lookouts sighted enemy dive bombers closing from astern and off her starboard quarter.
  - “The attack is coming in, sir,” said Admiral Fletcher’s aide. Frank Jack, looked up, said “Well, I’ve got on my tin hat. I can’t do anything else now.” and turned back to the chart to figure out his next move.
  - The Japanese dispersed to attack from different bearings making it difficult for the gunnery directors to track targets for the 5 inchers,
  - leaving the light AA (1.1 inch, 20mm and .50 calibre) as the mainstay of the defence. They emitted torrents of tracer but the results reinforced their reputation as revenge weapons.
- At **12.11** lookouts saw a dive bomber diving in steeply from astern.
  - As it plummeted below 1,000 feet to release its bomb, concentrated fire from the 1.1 inchers, clustered round the island, chopped the bomber into three large pieces.
  - His bomb fell free of the wreckage and despite tumbling end over end it hit Yorktown abaft the No 2 elevator. It detonated with a large, bright reddish sheet of flame that shot more than sixty feet skyward.
  - The blast swept the aft 1.1 inch mounts and killed or incapacitated most of the crews.
  - It blew a jagged eleven foot hole in the flight deck igniting a dangerous fire in the hangar below.



1.1" mount aboard USS *Enterprise* (CV-6), 1942.

## 4 June - Midway

- Six more attackers hit her with two more bombs, which snuffed out all but one of her boilers and destroyed one anti-aircraft mount. Speed was reduced to six knots and by 12.20 she was stopped.
- The damage and the loss of Yorktown's radar forced Admiral Fletcher to move his command staff to the heavy cruiser Astoria.



Smoke pours from *Yorktown* after being hit in the boilers by Japanese dive bombers at Midway.



# 4 June - Midway

- The last man to return from the strike was Dan Sheedy of Fighting 3. He was one of the pair of Wildcats flying close escort for Torpedo 3. In the onslaught by massed Zeros he had claimed one shot down but then been badly shot up and painfully wounded in the ankle and shoulder and then found himself alone in the sky.
  - He didn't have the height to receive the Zed Baker homing signal so navigated back to where he expected to find Yorktown by dead reckoning.
  - When he thought he was where he expected the ship to be he started a square search, as doctrine required.
  - On the second leg two Wildcats from Hornet's CAP were sent to look him over and he followed them home, very short of fuel.
  - The Hornet's flight deck aft was clear and at 12.29 the wounded Sheedy made his approach.
- As he was about to touch down the Wildcat skidded to the right. The impact of landing collapsed the right gear and when the wingtip slapped the deck all six of the Wildcat's guns cut loose in automatic fire.
  - The Wildcat's tail hook snagged the wire and slewed the aircraft to a stop.
  - Bullets ripped through the rear of the island structure into spectators watching the landing, then penetrated a one inch hardened plate to wreak havoc in Battle II.
  - The toll was five killed (including Lt Ingersoll, son of Admiral Ingersoll, commander of the Atlantic Fleet) and twenty wounded.
  - The flight deck crew helped the wounded pilot out of the cockpit, assessed the battered Wildcat as unserviceable and pushed it over the side.
- Yorktown damage control parties were able to temporarily patch the flight deck and restore power to several boilers by 13.40, allowing her to build up speed towards flight operations.
  - There were eight impatient pilots on board with flyable Wildcats just waiting for gas and wind over the deck.
  - Now the fire danger had abated the fuelling detail started pumping gas while the pilots inspected the repairs to the hole in the flight deck



# 4 June - Midway

- Since his unsuccessful attack on the cruiser screen Brockman in Nautilus had been making best speed on the surface to get back into the fight.
  - At **11.45** he sighted smoke on the horizon.
  - An hour later, after a periscope depth approach, he identified a Soryu class carrier, making two knots on an even keel escorted by two destroyers.
  - The after part of the flight deck had been destroyed but all fires appeared to be under control.
  - Brockman took his time to reach a good firing position undetected and between **13.59 and 14.05** fired three torpedoes from a range of 2,700 yards.
  - All three hit and exploded.
  - A long depth charge attack on Nautilus now began.



Photo # 80-G-20016 LCdr. William R. Brockman, Jr., Nov. 1942

Commander Brockman

# 4 June - Midway

- At **14.30** a second Japanese attack wave, consisting of ten Kate torpedo bombers and six escorting Zeros, found the *Yorktown*.
- Pederson, the FDO, had six Wildcats in the CAP and ordered McCuskey's division out at 10,000 feet.
  - He was assuming the bandits were at high altitude because they had been detected so far out.
  - His other section he vectored out at 7,000 feet.
  - He then requested help from task force 16, but the two groups had drawn 40 miles apart while Yorktown was stopped and Task Force 16 was steaming to conduct flight operations.
- McCuskey's four Wildcats missed the attackers in intermittent cloud, possibly because they were too high, and had to be called back by the FDO.
- The other two Wildcats of the CAP intercepted the attackers and shot down one bomber and damaged another but were then both shot down by the escorting Zeros.



Nakajima B5N2 "Kate" torpedo bomber.

# 4 June - Midway

- On the Yorktown the impending attack forced the air department to shut down the fuel system and send the Wildcats off with whatever they had in the tank after the morning's operations.
- Thach in the first of eight Wildcats was waved off at 14.40. The whole launch took two minutes.
  - During the last few launches Buckmaster was turning to starboard, to avoid torpedo planes charging up his port side, and even the shortest range AA was in action.
  - After take off it was necessary to crank up the landing gear by hand (twenty-eight turns of the handle), charge and test the guns, accelerate to some semblance of combat speed, and pick out a target.
- The Japanese drove in at 200 feet and 200 knots, twice the speed of the American TBDs.
- McCuskey's Division was diving back towards the carrier but got caught up with the Zeros of the escort. Two Zeros were shot down but the defenders were prevented from reaching the bombers.
- The eight wildcats that took off during the attack were pursuing the torpedo planes from the instant they were airborne. Thach, Leonard and Adams attacked the first four bombers and each shot one down although only Leonard prevented his victim from dropping his torpedo.
- Those taking off later had less time, less speed and were less experienced, most took some shots and probably damaged some attackers.
  - Milton Tootle, the least experienced of the group was shot down but bailed out and survived.
  - George Hopper, the last one off, was shot down and killed.

## 4 June - Midway

- Six Kates dropped torpedoes.
- Two torpedoes hit Yorktown at **14.42**. She lost all power and developed a 17 degree list to port.
- At **14.45** Samuel Adams flying one of the SBDs of Yorktown's afternoon search located Hiriyū with two battleships, three cruisers and four destroyers steaming north about 110 miles west by north of Yorktown.

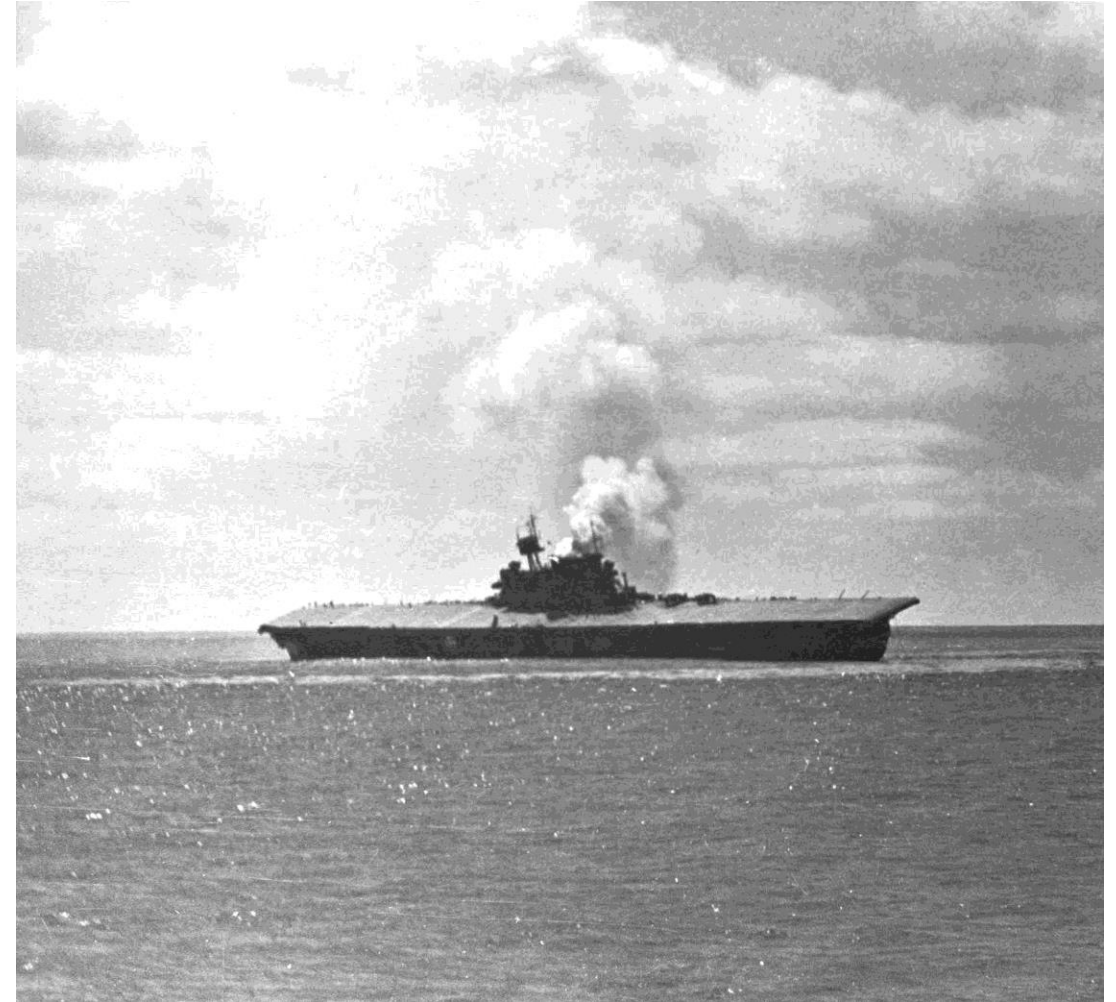


*Yorktown* at the moment of impact of a torpedo



# 4 June - Midway

- In the next 20 minutes Yorktown's list increased to 26 degrees.
- Captain Buckmaster, advised by his damage control officer that counterflooding was impossible without power, and that their watertight integrity had been only half restored by the repairs at Pearl, feared the Yorktown was about to capsize.
- A few minutes before 15.00 he ordered Abandon Ship.
- Four destroyers closed to take the men off or pick them up from the water.
  - The sea was smooth and, although the water was much colder than the Coral Sea it is believed that nobody drowned.





# 4 June - Midway

- At **15.30** *Enterprise* turned into the wind to launch a strike of 24 dive bombers (including 6 SBDs from VS-6, 4 from VB-6, and 14 from *Yorktown's* VB-3). No fighter escort was sent as the task force's depleted fighter squadrons were thought necessary to defend the task force.
- *Nautilus* came up for another look at **16.10** and found the carrier burning along its entire length.
- The SBDs attacked *Hiryū* at **17.00**.
  - Despite being defended by a strong cover of more than a dozen Zero fighters, the *Enterprise* and orphaned *Yorktown* SBDs hit her with four bombs leaving her ablaze and unable to operate aircraft.
  - Three more SBDs were lost in this attack.
- *Hornet's* strike, launched late because of a communications error, concentrated on the remaining escort ships, but failed to score any hits.
- Admiral Fletcher, obliged to abandon the derelict *Yorktown*, and feeling he could not adequately command from a cruiser, ceded operational command to Spruance.
- In late afternoon 2 B-17s attack carrier force at 31-40N 179-10W, claiming hits on a battleship and a carrier and 3 airplanes shot down.
- 4 other B-17s claim a hit on heavy cruiser 185 mi from Midway.
- 6 B-17s, en route to Midway from Hawaii, bomb ships 170 mi from Midway, claiming hits on a burning carrier and a destroyer, which is claimed sunk.
- From his low and precarious vantage point Ensign Gay watched the rest of the battle. At dusk he came out from under his floating cushion, inflated his life raft and climbed in.

# 4 June - Midway

- Of the 25 VMF-221 fighters which had gone in against the attacking Japanese planes, only 10 returned, and of this number only two were in shape to leave the ground again.
  - Thirteen Buffaloes
  - and two Wildcats were missing,
  - along with the eleven dive bombers.
- At **17.00** a burning enemy carrier was reported 200 miles northwest of Midway.
- Major Norris prepared VMSB-241's six operational SBDs and five SB2U3s for a night attack.
- The planes took off at **19.00** but could not find the carrier.
  - Major Norris failed to return.
  - The other pilots managed to home by the light of oil fires and the anti-aircraft searchlights which were turned up as beacons.



Vindicator Vought SB2U-3

# 4 June - Midway

- Spruance knew the United States had won a victory, but he was still unsure of what Japanese forces remained and was determined to safeguard both Midway and his carriers.
  - To aid his aviators, who had launched at extreme range, he had continued to close with the Japanese during the day and persisted as night fell.
- Fearing a possible night encounter with Japanese surface forces, and believing the Japanese still intended to invade,
  - Spruance changed course and withdrew to the east to avoid an eastward thrust by Japanese surface forces,
  - turning back west towards the enemy at midnight to be close enough to defend Midway at first light.



# 4 June - Midway



On the evening of 4 June, in Fighting 6's ready room on the Enterprise, Jimmy Thach, the skipper of Fighting Three, drafted a preliminary report on Fighting 3's morning escort mission over the Japanese carriers.

- Versus the Japanese fighters the F4F-4 Wildcat was “pitifully inferior in climb, maneuverability and speed”.
- He concluded his report with a warning.
- “This serious deficiency not only prevents our fighters from properly carrying out an assigned mission but it has a definite and alarming effect on the morale of most of our carrier based fighter pilots. If we expect to keep our carriers afloat we must provide a fighter airplane superior to the Japanese Zero in at least climb and speed, if not maneuverability.”

# Midway – What We Now Know

- The Japanese fleet carriers Shōkaku and Zuikaku, the former damaged and the latter with a depleted aircraft complement after the Coral Sea, were unable to participate in the operation to invade Midway.



Shōkaku, at high speed and turning hard, has suffered bomb strikes and is afire at the Coral Sea.

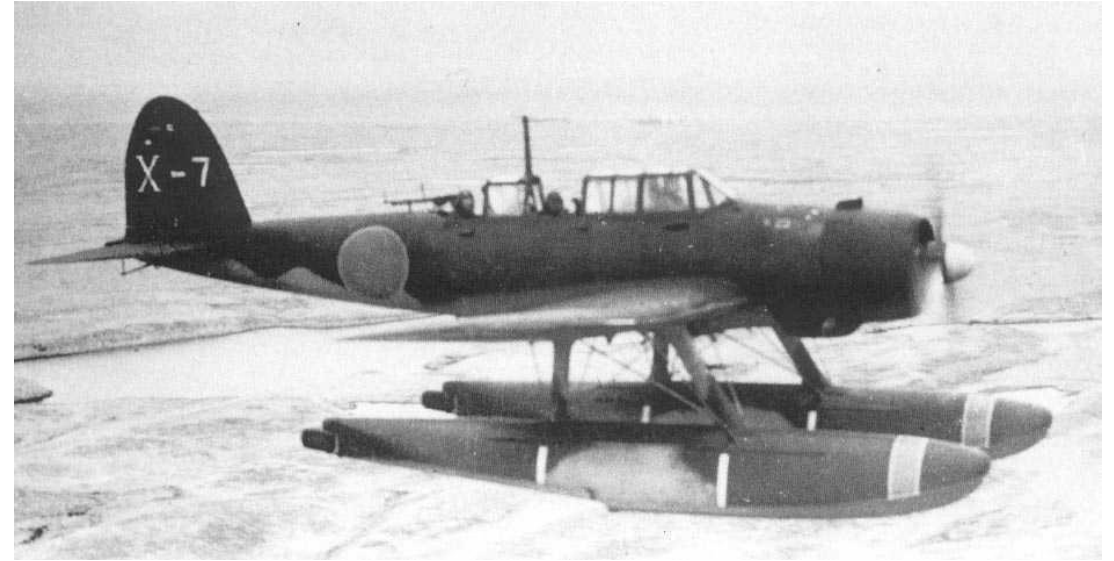


# Midway – What We Now Know

- Seven Japanese carrier aircraft (two fighters one dive bomber and four torpedo planes) failed to return from the Midway strike and others were badly shot up.
- Lt Tominaga radioed the flagship at 07:00 “There is need for a second attack wave”.
- Tominaga's message reached Nagumo just ahead of the first wave of attackers from Midway.
- For the loss of two zeros the Japanese shot down five TBFs and two B 26s.
- Nagumo decided to hit Midway again with the aircraft waiting in reserve. The morning search had proved negative so far and it appeared likely no American ships lurked close by. At 07:15 Nagumo ordered Akagi and Kaga carrier attack planes re equipped with 800 kg land bombs in place of aerial torpedoes while the carrier bombers on board the Soryu and Hiryu would substitute high explosive land bombs for armour piercing weapons.

# Midway – What We Now Know

- While the Japanese rearm their planes a Japanese floatplane, the Tone #4 Jake, which had departed at 0500 30 minutes late to search 300 miles out along a heading of 100 degrees before turning N 60 miles and returning to base, radioed the Tone at 07:28.
- “Sight what appears to be 10 enemy surface ships in position bearing 10 degrees distance 240 miles from Midway, course 150 degrees speed over 20 knots.”
- Nagumo at 07:45 suspended rearming the strike planes with land bombs (those armed with the high explosive weapons would be left that way)
- Shortly before 08:00 the first Marine dive bomber wave attacked. The CAP shot down 8 SBDs for the loss of one Hiryu Zero.



The Aichi E13A (Allied reporting name: "Jake") long-range reconnaissance seaplane

# Midway – What We Now Know

- At 08:20 the Tone #4 radioed to base that the enemy force apparently included a carrier. Fuel beginning to run low, the floatplane warned it would soon start home.
- Nagumo and his staff hurriedly conferred at the news of the American carrier while the CAP Zeros beat off the last of the Midway based dive bombers.
- Only about half a dozen Zeros were ready to go on a strike. Most of the rest were on CAP and would have to land for fuel and ammunition before they could serve as escorts.
- Overhead aircraft from the first Midway strike group had returned and they were low on fuel having been aloft for about four hours.
- Admiral Yamaguchi on board the Hiryu urged an immediate attack by all available bombers even without fighter escort if necessary. He desperately wanted to land the first blow in the impending carrier dual.

# Midway – What We Now Know

- Nagumo rejected Yamaguchi's advice and adopted the cautious course of delaying the strike until after the recovery of the Midway strike group.
- He planned to swing northeast to regroup then at 10:30 launch a massive strike of 36 carrier bombers 45 torpedo bombers and 12 Zeros. All he needed was two hours.
- At 08:37 the four Japanese carriers turned into the wind and began recovering fuel hungry CAP Zeros and the Midway strike planes.



Vice Admiral Chuichi Nagumo

# Midway – What We Now Know

- At 10:20 the flagship gave the signal to launch planes. Almost simultaneously lookouts spotted American dive bombers poised over the Kaga.
- The CAP was totally unprepared for a dive bombing attack. In contrast to the two previous torpedo attacks there were now no fighters held in reserve, all had swarmed eagerly after Torpedo Three or Thach's Wildcats.
- At 10:22 McCluskey pushed over onto the Kaga. The Akagi commenced launching Zeroes, holding course into the wind to launch aircraft.
- The first of four bombs slammed into the Kaga preventing the launch of her strike group. Flaming aircraft and explosions soon turned the Kaga's flight deck and hanger into an inferno and doomed the vessel.
- The Akagi's is time had also come at 10:25 the 1st Zero started down her flight deck but Best's five SBD's already hurtled towards her. His pilots secured 2000 pound bomb hits, one detonating in the midst of the 18 carrier attack planes spotted aft on deck for launch. The fleet flagship had taken mortal damage.
- The Soryu tried to evade by turning North but Leslie's pilots smothered her with three 1,000 pound bomb hits. The Soryu's flight deck was destroyed as the gasoline and bombs from her 18 carrier bombers exploded in the flames. In the hangar, nine armed carrier attack planes helped torch her vitals.



# Midway – What We Now Know

- Only the carrier Hiryu remained unscathed. Both Yamaguchi and his superior Abe determined to carry on with the planned airstrike against the American carrier force, located fully 3 hours before by the morning search.
- On board the Hiryu were only 37 operational aircraft, 10 Zero fighters, 18 carrier bombers and 9 carrier attack planes. Scattered aloft were another 27 zeros from all four carrier air groups. The Hiryu had prepared the 18 carrier bombers and three Zeros for launch.
- In the hangar mechanics readied the nine torpedo planes for a possible 11:00 launch. Yamaguchi resolved to commit his dive bombers immediately as originally scheduled then follow in an hour or so with the 2nd wave of nine torpedo planes. He beefed up the fighter escort for the first strike from 3 to 6.

# Midway – What We Now Know

- by the time Kobayashi departed on the mission 2 Japanese search planes had latched onto the American carrier force. The Chikuma #5 floatplane continued to transmit accurate reports. At 11:00 Abe told its crew to guide the attack unit to the target. 10 minutes later the Chikuma Flyers responded that the American force bore 70 degrees and 90 miles from the kido butai.
- 9 minutes later the Hiryu rebroadcast for Kobayashi's benefit that the American carrier force lay 70 degrees and 90 miles from the kido butai.
- Kobayashi had little difficulty in taking up a direct course to the target which in that case happened to be task force 17.

# Midway – What We Now Know

- On board the Hiryu the second wave was ready to go at 12:45 but Yamaguchi delayed the launch until he could learn more about the enemy's situation. Hiryu's second strike comprised 16 aircraft, 10 torpedo armed carrier attack planes and six supporting fighters. In the dawn Midway attack the Hiryu's carrier attack unit had taken grievous losses, three shot down and one ditched and four others unservicable from battle damage.
- At 12:45 one of the dive bomber crews transmitted to the Hiryu.
- "number one enemy carrier is burning. I see no friendly planes in range of visibility. I am homing. 9:45 (five June Tokyo time)
- 5 minutes later a reconnaissance aircraft returned from its search and dropped a message onto the Hiryu's flight deck. Yamaguchi thereby learned that its crew had spotted no fewer than three enemy carriers identified as the Yorktown, Enterprise and Hornet.
- Yamaguchi instructed Tomonaga to hunt one of the two undamaged American carriers.
- Tomonaga's small strike force took off, formed up and departed at 1331.
- With the Hiryu's flight deck free the battered survivors of the first raid came on board. Only five dive bombers and one fighter returned. 13 dive bombers and three fighters were missing and another zero had ditched earlier.

# Midway – What We Now Know

- Tomonaga broke radio silence at 1432 with the command “take positions in preparation for attack”.
- The Hiryu flyers soon discerned what looked like one carrier screened by 5 heavy cruisers and 12 destroyers. The Americans held course 90 degrees speed 24 knots. They could see no indication that this carrier was hurt. They assumed that they had located a fresh target.
- At 1440 the same time Thach sped down the Yorktown's flight deck Tomonaga radioed his attack planes “All go in”
- Levelled out at 200 feet making between 180 and 200 knots extremely swift for torpedo planes, they made a fire directors nightmare for the American anti aircraft gunners.
- Hashimoto at 14:45 had instructed his radioman to send the following message
- “I carried out a torpedo attack against an enemy carrier and saw two certain hits”
- 5 carrier attack planes and 4 Zeros withdrew from the inferno of the American task force, five torpedo bombers and two zeros splashed.



Yorktown at the moment of impact of a torpedo from a Nakajima B5N of Lieutenant Hashimoto's 2nd chūtai.

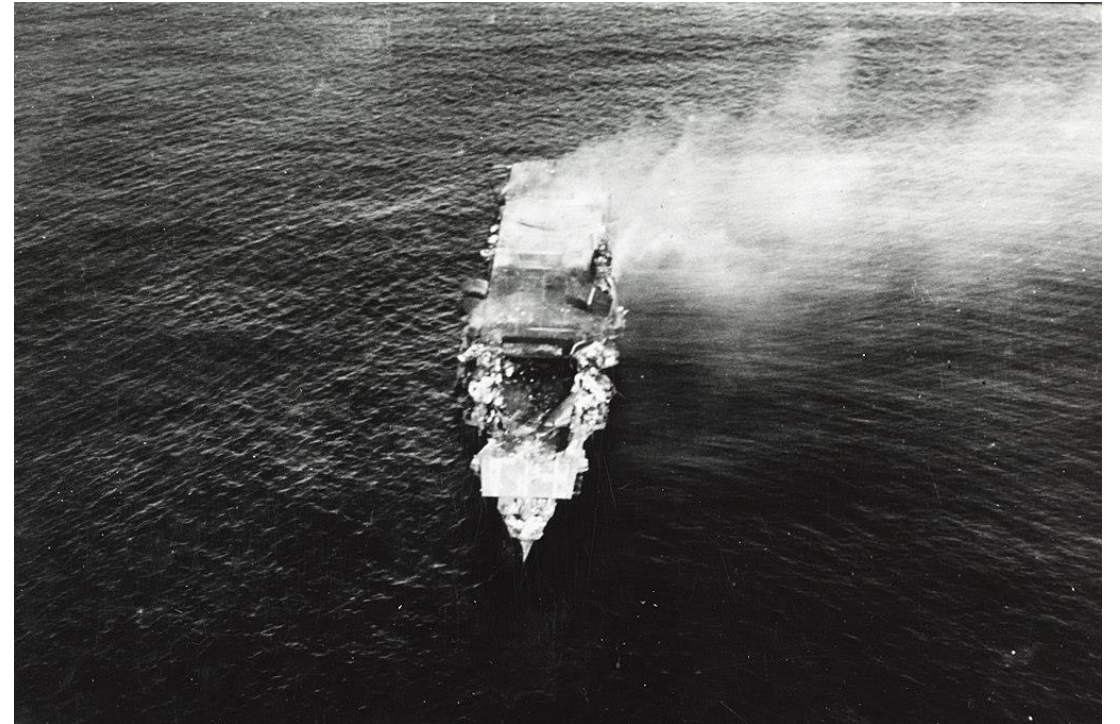
# Midway – What We Now Know

- While he awaited word from Tomonaga's strike Yamaguchi planned the third round.
- Around 14:50 came welcome news that the Hiryu crews had found and torpedoed an American carrier making two down and one to go according to Yamaguchi's scorecard.
- At 15:15 Hashimoto on his way back amplified his report and gave the American position, useful since the Japanese had lost contact at 14:00 when Wildcats had destroyed the Chikuma #5 aircraft.
- Yamaguchi hoped to launch his third strike around 18:00 so that they could attack dusk and hopefully neutralise enemy superiority in fighters and anti aircraft defence. Hiryu was readying 6 dive bombers and nine fighters for the third strike, more aircraft might be available salvaged from whatever Hashimoto brought back.
- Hashimoto's five torpedo bombers reached the skies over the Hiryu around 15:30. 5 carrier attack planes failed to return and even those that survived were largely wrecked. Only one of Hashimoto's planes was deemed to be serviceable. Of the six zeros on the mission three returned to Hiryu, two were lost and the 6th later ditched.
- Tone's sighting report came at 15:15 from the number 4 aircraft. Number four at 15:50 made the significant discovery the Americans still had at least two carriers afloat.



# Midway – What We Now Know

- On board Hiryu the flight deck crews completed preparations to launch the reconnaissance plane to seek the one undamaged American carrier and guide the third strike to it.
- Gallagher's scouting 6 pushed over onto the Hiryu at 17:05. Four bombs in close succession slammed into her forward of the island, the blast blew the forward elevator up against the superstructure and ignited intense fires, the Hiryu was doomed.



Hiryū, shortly before sinking

# The State of Play After Midway

- By late June Nagumo's first air fleet comprised only five flattops with another nearing completion. Three of the six were designed as carriers from the keel up. The Shokaku and Zuikaku commissioned in 1941, each of 25,600 tonnes 34 knots, and the older 1934 light carrier Ryujo 10,600 tonnes 29 knots.
- The Zuiho 11,200 tonnes 28 knots was a converted sub tender.
- The Junyo and Hiyo each 24,100 tonnes 25 knots were both transformed from passenger liners.
- Under repair since the 17th of May at Kure the Shokaku would be ready by late July and the Hiyo neared completion.
- Greater emphasis after Midway on fighters and carrier bombers increased the aircraft complement of these six carriers to 300 (141 fighters 90 dive bombers and 70 torpedo bombers) mostly by adding 39 fighters and subtracting 5 carrier attack planes.
- In contrast the six big carriers that attacked Pearl Harbour the previous December wielded no fewer than 414 aircraft.

# The State of Play After Midway

- The US Pacific fleet was left with only two surviving carriers after the Battle of Midway. This was increased to three on the 6th of June when Saratoga returned from repairs on the West coast and reached Pearl Harbour.
- On 19th of June USS Wasp reached San Diego after transferring from the Atlantic to the Pacific fleet. Wasp sailed on the 1st of July from San Diego escorting the marine convoy to Tonga .
- These four carriers were all of approximately the same speed and in total carried 320 aircraft.
- There were then no fleet carriers remaining with the Atlantic fleet.

# The State of Play After Midway

- On 14 July in a major reorganisation of the entire combined fleet Nagumo's first air fleet became the third fleet. The third fleet also received the two fast battleships Hiei and Kirishima and four heavy cruisers.
- In early August Nagumo's flagship Shokaku and also the Kirishima received the type 21 Go Dentan air search radar, model one, a later version of the air search radars originally installed in May on the old battleships Ise and Hyuga
- For the for the Guadalcanal counteroffensive Yamamoto at first allocated only the first carrier division Shokaku, Zuikaku and Ryujo with 177 aircraft (78 fighters 54 dive bombers and 45 torpedo bombers) the other three flattops needed at least another month to prepare.
- Even to bring his three carrier air groups to authorised strength required stripping the Junyo, Hiyo and Zuiho of fighters and carrier bombers. They lacked 29 fighters and 16 dive bombers although retaining 15 more torpedo bombers than authorised.

# 20 May - Air

- **New Guinea**
- MacArthur, on the 20th, authorised the construction of an airstrip in the Abau-Mullins Harbour area.
  - At the same time he ordered that the air force bring its squadrons at Moresby up to full strength and that
  - American anti-aircraft troops be sent from Brisbane to the forward airfields at Townsville, Horn Island, Mareeba, Cooktown and Coen.
- Eleven P39s encountered a similar number of Zeros over Waigani.
  - The P39s had the altitude advantage and dove out of the sun for one good pass.
  - 1Lt Lynch quickly shot down two Zeros but only claimed probables as he didn't see them crash.
  - One P39 was shot down, the pilot bailed out and survived but was too badly wounded to continue combat missions.
  - Several days later a patrol found the wreckage of two Zeros near the area and Lynch was officially credited with two victories.
- **NEI**
- B17s attack the airfield and AA guns at Koepang on Timor.
- **Australia**
- On 20th May 1942 the Air Board decided to make 45 squadrons the objective to be achieved by the end of the year.



Admiral JS McCain

- **South Pacific**
- Adm McCain, aboard USS Tangier at Noumea, assumes command as COMAIRSOPAC.



# 30 August - Solomons

- Admiral McCain visited Henderson Field to see conditions first hand. He shared a tarpaulin tent with General Vandegrift. Japanese destroyers commenced their usual night time bombardment, everyone came out of their holes to take a look.
- McCain and Vandegrift stood in front of their tent watching the uproar.
- After a minute or two the Admiral said “Well son, this is your war. I’m going back to bed.”



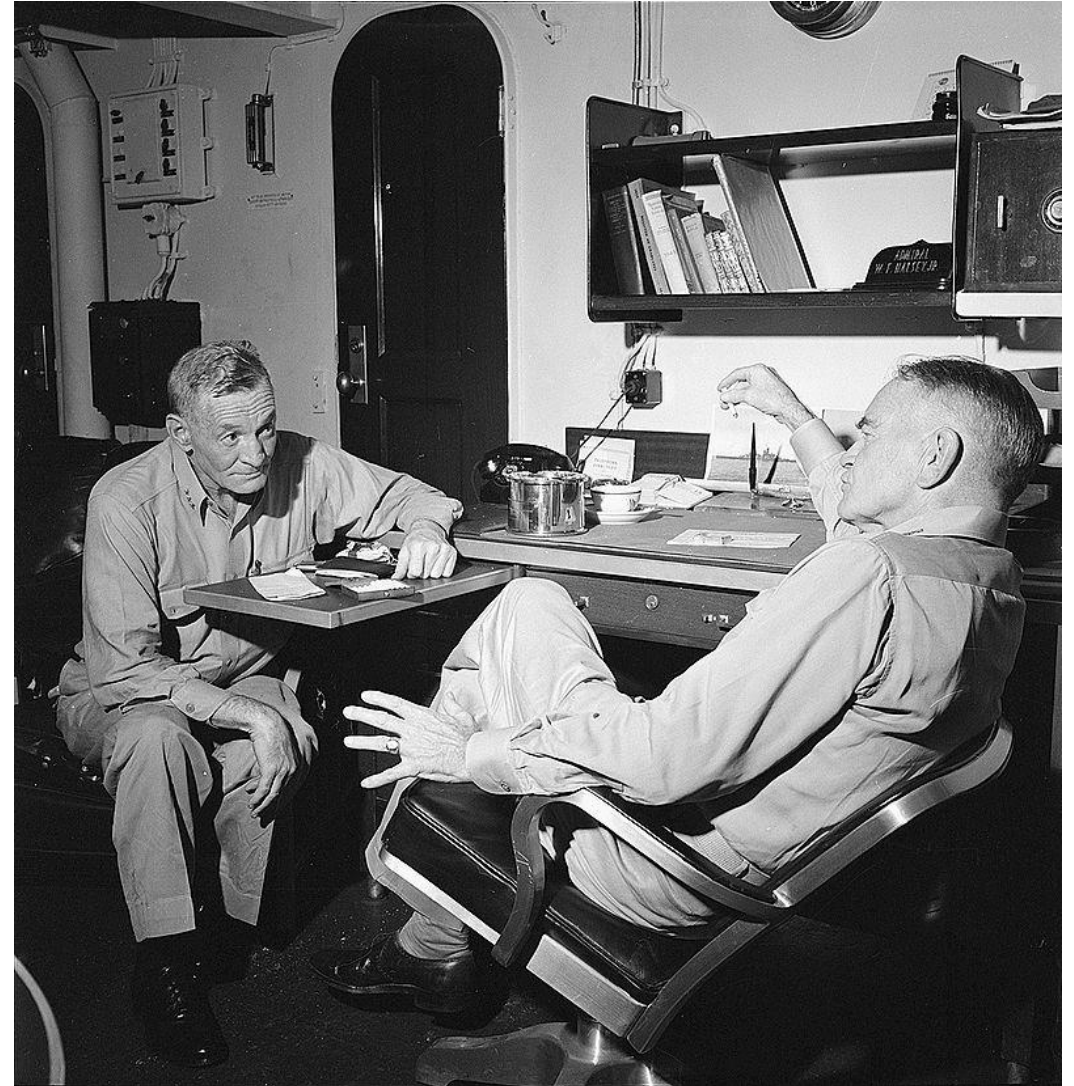
Our first visitor RAdm. John S. McCain and Maj. Gen. Alexander A. Vandegrift outside the operations section tarpaulin on Guadalcanal. McCain's fighting spirit was welcome.

# 30 August - Solomons

- The alarming rate of decline in the effective strength of the Henderson Field fighter Squadron had prompted Ghormley, on 27 August, to request an air reinforcement program based on actual attrition rates, no less than 26% per week for fighters.
- On 30<sup>th</sup> two important travellers added a chorus of support.
- Under Secretary of the Navy, Forrestal paused in his inspection of the South Pacific to radio that the flow of planes to Guadalcanal, particularly fighters, was “imperative for the position to be held”
- Admiral McCain, after his visit to Henderson, declared:
  - “...2 full squadrons of P38s or F4Fs in addition to present strength should be put into Cactus at once, with replacements training to south. ...
  - The situation admits of no delay whatever. ...
  - With substantially the reinforcement requested, Cactus can be a sinkhole for enemy air power and can be consolidated, expanded and exploited to the enemy’s mortal hurt.
  - The reverse is true if we lose Cactus.
  - If the reinforcement requested is not made available, Cactus cannot be supplied and hence cannot be held.

# Admiral McCain

- In October 1942, the Navy ordered McCain to Washington, to head the Bureau of Aeronautics.
- In August 1943, he became Deputy Chief of Naval Operations for Air with the rank of vice admiral.
- McCain returned to combat in the Pacific in August 1944 with his appointment as commander of a carrier group in Marc Mitscher's Task Force 58 (TF 58), part of Spruance's Fifth Fleet. In this role, McCain participated in the Marianas campaign, including the Battle of the Philippine Sea, and the beginning of the Philippines campaign.



# Admiral McCain

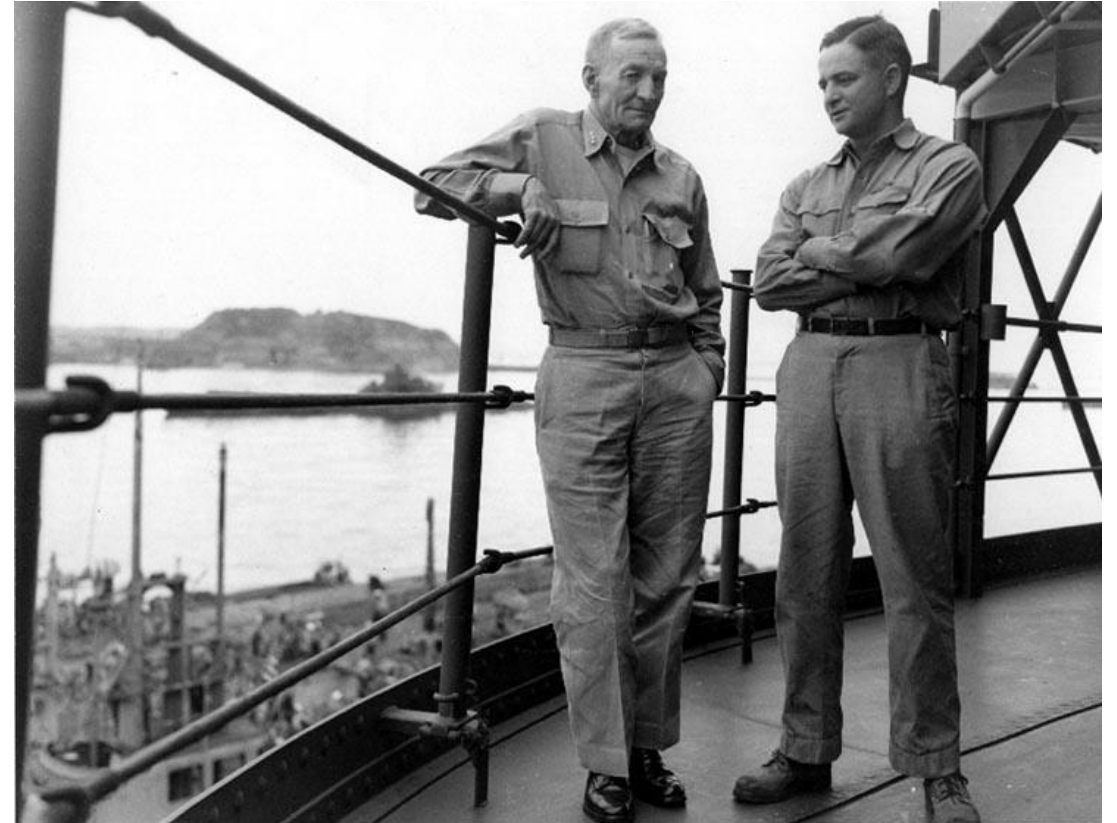
- On October 30, 1944, McCain assumed command of Task Force 38 (TF 38) under Admiral Halsey. He retained command of the fast carrier task force through the Battle of Okinawa and raids on the Japanese mainland.
- By war's end, the stress of combat operations, lifelong anxiety, and probable heart disease had taken its toll on McCain.
- He requested home leave to recuperate, but Halsey insisted that he be present at the Japanese surrender ceremony in Tokyo Bay on September 2.
- Departing immediately after the ceremony, McCain died four days later of a heart attack at his home in Coronado, California.





# Admiral McCain

- His family were convinced that the war had killed McCain just as certainly as if he'd been killed by Japanese shell.
- They did not let the toll that the service sometimes took dissuade them from continuing in the service of the Republic.
- His son John Sidney McCain junior (seen here in a photograph with his father a few days before his father's death) stayed in the Navy and rose to command the Pacific Fleet in his own war.
- John Sidney McCain the third joined the Navy and was promoted Captain.
- He was shot down over Vietnam and spent five and a half years as a prisoner of war in Hanoi before entering politics, representing Arizona in the Senate and running as the Republican candidate for President.





# Admiral McCain

- You could speculate that these dynasties of powerful men must have been marrying remarkable women to maintain the family's status over three generations.
- This theory is supported by Roberta, Mrs John Sidney McCain Junior.
- She married McCain in Caesars Bar, Tijuana in 1933 while he was absent from his ship without leave and she was on the run from her mother.



Roberta at the launch of the guided missile destroyer John S McCain in 1992. She had launched the previous USS John S McCain in 1952.

# Admiral McCain

- Roberta actively campaigned for her son when he was elected to the Senate and when he ran for President as the Republican candidate in 2008.
- She survived to attend the funeral of her son the 81 year old senator.
- Roberta died last night at the age of 108.



Roberta beside her son John McCain's casket in 2018.