AUSTRALIAN ARMY AMPHIBIOUS OPERATIONS IN THE SOUTH-WEST PACIFIC: 1942-45

MARITIME ASPECTS OF AUSTRALIAN AMPHIBIOUS OPERATIONS

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The Australian Defence Force currently defines amphibious operations as; 'joint operations, in which land forces are landed and supported from the sea as a combat operation prepared to meet armed opposition'.[1] Though definitions vary, there have been during the 20th Century at least 114 major landings or assaults from the sea into hostile territory.[2] More than 90 of these occurred during the Second World War and over half were in the South-West Pacific Area (SWPA). The vast majority of all attempted assaults have been successful. Only two operations have failed so utterly that they were abandoned before reaching the landing area.[3] Another two were never launched, though men, materials and shipping had been assembled.[4] The common failing in all these four later cases was that the requirements for control of the sea and air could not be met.

The need for sea and air control highlights the joint nature of amphibious operations. Continuous cooperation is essential, and all efforts by the three individual services must be directed towards the same end. Command and control of the combined forces involved is therefore a vital factor. Exactly when, for example, does command of the assault pass from the maritime to the land commander? Who controls air support? Where are the lines of responsibility drawn during planning?

This paper will cover these questions and others by examining the maritime aspects of the Australian Army's amphibious campaigns during World War II. The special naval task being to land the army at the right place, in the right order, and provide conditions to ensure that the flow of reinforcements exceeds that of the enemy. Though their execution was similar, there were differences between the individual Australian assaults, and I will be drawing examples from several, rather than focusing on a specific landing. The paper will progress from the top down, starting with the operational planning that took place at the higher levels of command and working down to the command and control of the beachhead.

From September 1942, Rear-Admiral AS Carpender USN was General Douglas MacArthur's Commander of Allied Naval Forces in the SWPA. Under Carpender's command were units of the United States (USN), Royal Australian and Royal Netherlands Navies. Carpender received his orders from General MacArthur but received most of his ships and men from Admiral Ernest J King, the USN's Commander in Chief. Initially Carpender had little to command except submarines, and even these were only nominally his. As far as MacArthur was concerned, the campaign for New Guinea was primarily a land and air show, and in any case USN forces were fully occupied with operations around Guadalcanal. An American Army Unit, equipped with landing craft and known as the 2nd Engineer Special Brigade, had been used for small scale movements by sea, but it was soon clear that to assist his movement along the coast of New Guinea and then continue his northern offensive, MacArthur would need greater access to naval forces.[5]

As they gradually increased in number, Carpender's naval units were divided into separate task forces according to the specific mission assigned.[6] From MacArthur's viewpoint, the most important of these task forces was the Amphibious Force, commanded by Rear Admiral Daniel E (Uncle Dan) Barbey USN. Barbey had primary carriage of all amphibious operations in the SWPA. He was known as an excellent planner, an inspirational leader, and possessed of the most extraordinary organising ability.

Barbey was arguably the most knowledgeable man in the USN when it came to amphibious warfare. In the years before the war, he was one of the few officers to have taken a professional interest in landing ship design and the doctrine for their use. As a whole, the prewar USN had shown little concern for amphibious forces, and serious planning for amphibious operations did not commence until the months following Pearl Harbour. It was therefore not surprising that in 1942 Barbey found himself appointed the first head of Admiral King's amphibious warfare section, responsible for all training and procurement programs. In the short period he was in the job Barbey set in motion the massive expansion in amphibious shipping that was to soon land millions of men, and millions of tons of supplies, in Africa, Europe and the Pacific.

When Barbey assumed command of Amphibious Force SWPA in January 1943, he found an enormous task before him. His forces at first consisted of only himself and one aide.[7] His requirements for personnel, ships and supplies could only be met from those that could be spared from other theatres. On a global scale, the SWPA was not a particularly high priority and even when men and equipment did start to arrive, Barbey found his crews came from all walks of life. It was not unusual to find that an entire ship's company, including the officers, had never been to sea before the voyage to Australia.[8] In Barbey's autobiography he recalls one Officer of the Deck who thought that by zigzagging he could keep the ship out of the rays of the moon, thus avoiding being sighted by a Japanese submarine.[9]

Without sufficient numbers of the big amphibious transports used in other theatres, no dedicated air support, and only destroyers for naval gunfire support, Barbey and his team had to develop new techniques for amphibious operations. To begin with, the beaches chosen for assault had to be lightly defended and suitable for beaching a variety of ships and landing craft. Secondly, there needed to be a great reliance on surprise and finally, because the beaching ships had to be used both for the assault and for reinforcement, a quick turnaround was vital.[10]

On a professional level, Barbey got on well with MacArthur, and was not afraid to state his point of view. In one of his early calls on the General, Barbey had attempted to impress upon MacArthur what he considered the fundamentals of amphibious operations. In particular, Barbey stressed that the Navy must, 'be in full command and charge of all amphibious planning, loading and operations from departure until the beachhead had been secured'.[11] As will be seen shortly these points seem to have been only partially accepted. Without a unified command below MacArthur, landings in the SWPA were planned and carried out on the basis of cooperation, and it was the Army Landing Force Commander who was charged with the coordination of planning.[12]

All of Barbey's amphibious assaults came at the order of MacArthur through the Commander Naval Forces, either Carpender, or his replacement Admiral Thomas Kinkaid. Both Carpender and Kinkaid were firm believers in the delegation of authority and soon recognised that Barbey needed little guidance and rarely interfered in the actual conduct of his landings.

MacArthur's General Headquarters (GHQ) would begin by issuing a general directive for the next operation, providing background information, an outline plan and a detailed statement of the forces allocated and specific tasks assigned. Within the directive the Commander Naval Forces, was tasked as follows:

- in conjunction with Allied Air Forces, execute preliminary air bombardment missions within the objective areas;
- as arranged with the Landing Force Commander, transport, protect and establish the seaborne landing force ashore;
- transport supporting troops and their supplies as required by naval assault shipping;
- provide preliminary naval bombardment, naval fire support and minesweeping operations in all landing areas, as required; and
- in conjunction with Allied Air Forces, protect overwater lines of communication and destroy hostile naval elements threatening the operation.

With the directive from GHQ in hand, the next step was for the planning staffs of the Naval Attack Force Commander and Landing Force Commander to meet. The two Commanders had to agree on the exact date, hour and place of the landing, based on many factors, including the availability of troops and shipping, enemy defences and prevailing environmental conditions. In practice, most of the detailed planning devolved to their staff and the senior commanders would only get together for the major decisions. Additional naval participation in the coordination of plans, in matters such as naval gunfire, rested with the individual close support Task Force Commanders.

The requirement for Barbey, as Commander Naval Attack Force, to transport and land the assault and supporting forces, as required by the Landing Force Commander, did not always sit well with the Navy. During the amphibious movement and landing, the Commander of the Naval Attack Force was also in charge of the offensive, this command continuing until the Landing Force was established ashore. These two instructions were seen to be in conflict. The possibility existing that the Attack Force Commander could be forced to accept situations, circumstances and conditions that were unsound from the naval point of view, and yet for which he could be held directly responsible in the event of failure.[13]

At Balikpapan, for example, the Navy disagreed with the Army's choice of landing beach because it was in the area where Japanese defences were strongest. This choice would mean the minesweepers having to operate close under the enemy's guns while supporting warships would have to stand further offshore. Naval planners were so concerned, that at one stage the Commander of the Landing Force, was told that Balikpapan might prove to be the first unsuccessful landing in the South-West Pacific.[14] Navy, however, was overruled and Army opinion prevailed.

With teams inexperienced in combined operations, it is not surprising that planning was haphazard to begin with. There were also national differences in planning techniques to be overcome. Coordination between the services was particularly poor. Three weeks before the landing at Lae both the US Air Force and Navy complained that they were having considerable difficulty obtaining detailed information from the Australians on which to base their plans.[15] The Army and Navy meanwhile, claimed that final planning discussions were hampered because the air force had no representative 'with sufficient authority to make definite decisions'.[16] Finally the Army felt that: 'because the naval staff remained in their headquarters ship, ... eight miles away, intimate cooperation was not achieved, naval representation being spasmodic and uncertain at planning conferences'.[17]

The logistic difficulties of transporting the follow-on forces also took some time to be appreciated. New Guinea Force's first outline of the plan for the Lae landing included only the movement of the assault element of 13,000 men. The Advance Base Command, Air Force Ground echelons and other support units totalling 15,000 men, had been, according to GHQ, conveniently forgotten. With Barbey unaware of what was coming later, a real danger existed that the forward area would not be able to be maintained by his ships.[18] Unsurprisingly, GHQ was highly critical of the Australians, one US commentator noting: 'Judged from our standards of the preparation of combat operations orders it is elementary and incomplete'.[19]

The planning task grew as the war continued. During the first operations in New Guinea, Barbey had approximately 40 ships and a small personal staff. Barbey controlled the assaults from a commandeered destroyer. By the time of his later landings in the Philippines, Barbey had 100 staff, more than one thousand ships, and three separate attack groups, each commanded by a Rear Admiral with their own staff and flagship. Over the course of the war, Barbey conducted some 56 successful amphibious landings, averaging one every 13 days. Planning time varied according to the mission but was often extremely short. Three or four days to prepare plans and assemble ships and cargo was not unusual. However, as Barbey noted in at least one report, the few days available for planning did not necessarily handicap an operation. With the high number of successive operations executed his team soon became very familiar with requirements.[20]

The naval task force organisation used was extremely flexible and allowed individual units to be transferred easily between forces as required for a specific operation. The assault on Balikpapan provides a good example. With 257 ships, the assault force was the largest assembled in the SWPA since Lingayen Gulf, and the largest ever involving Australian troops.

Vice Admiral Barbey again exercised general naval command as Attack Force Commander and Commander Task Force 78. The Attack Force itself was split into two major components. First was the Balikpapan Attack Group, TG 78.2, commanded by one of Barbey's three deputies, Rear Admiral AG Noble USN.

TG 78.2 was made up of several units, the largest being the Transport Unit, which comprised some 90 landing ships and landing craft of all sizes. In addition, TG 78.2 had a Minesweeping Unit, Underwater Demolition Unit, its own Screening Unit of 16 destroyers and frigates, a Service Unit, and a Hydrographic Unit. A Close Support Unit, including rocket and gun-fitted landing craft, provided firepower on the beach while a Motor Torpedo Boat Unit was also temporarily attached. Most of the Task Group passaged to the beaches in company as the 'assault convoy'. However, some units, notably the hydrographic ships, minesweepers and demolition teams left more than two weeks earlier to begin beach preparations.

The second component of the Attack Force was the Fire Support and Covering Group, TG 74.2, commanded by Rear Admiral RS Riggs USN. This Task Group was not a part of the Amphibious Force, being allocated by Admiral Kinkaid to Barbey, specifically for the Balikpapan operation. TG 74.2 comprised the four ships of Cruiser Division 12, augmented by the three Australian and Dutch cruisers of TG 74.1, and a separate screen of nine destroyers. The ships were then further split into individual Fire Support Units comprising one cruiser and one destroyer. Riggs was also tasked with the coordination of all naval forces in the area until the arrival of the Attack Group Commander.

Training before an operation was essential. Troops had to get used to clambering down cargo nets with full kit and boarding the waiting boats as rapidly as possible. Landing craft had to understand what they were transporting ashore and where to take it. Maintenance of a strict schedule was vital to avoid confusion. A full rehearsal was usually held a week before the landing. Common complaints after rehearsals included the light-hearted attitude of the troops, their failure to wear steel helmets and their reluctance to disembark down the nets at more than two or three at a time.[21] Of interest was the encouraging effect of an air attack during an actual landing, when ten men were seen to be clambering down a net simultaneously.[22]

Unfortunately, it was not unusual for the troops to be loaded many days before a ship sailed for an operation, often in overcrowded and uncomfortable conditions. One Landing Ship Tank (LST)[23] destined for the Brunei Bay assault was loaded with 46 vehicles, 300 tons of bulk cargo and was in addition fitted out as a hospital LST. Fresh water and latrines were inadequate for the 457 troops carried and there was very little space under cover. As one observer noted:

> With frequent heavy rain whilst in harbour for the six days before sailing, the cramped and uncomfortable conditions obtaining and the impossibility of getting exercise, the troops were as dispirited and disappointed body of men as seen when I joined.[24]

Another factor found to affect fighting performance was the weather. Even moderately rough seas invariably produced chronic seasickness in the embarked troops, many of whom had never before been to sea in small ships. After finding 50 per cent of the troops seasick before his first operation, Barbey learned to consider forecasts of sea conditions in the future.[25]

To ensure the conditions necessary for a successful assault and build up, local command of the sea and air had to be achieved before the landing, and maintained until forces were established ashore. Unfortunately, in most of the early amphibious operations in New Guinea, the Allied Air Forces were unable to guarantee continuous air cover, and there were insufficient naval forces to provide protection from an enemy fleet. The air threat in particular,

made planning difficult. In 1943, Barbey had only limited assets at his disposal, there was little chance of early replacements, and he was well aware of heavy future requirements.

The landing at Lae, for example, not only had to be combined with a separate air assault because of the shortage of shipping, but the beaching ships only became available 14 days before the operation. In the remaining time the ships needed to be assembled at the loading ports, operating plans distributed, rehearsals held and troops and supplies loaded.[26] Lae was also to be the first opposed landing for the Seventh Amphibious Force, and Barbey made it clear during planning that he wished to take few risks. He was particularly anxious to unload troops and stores quickly and get his landing ships back to the open sea as soon as possible, both for safety and so he could commence resupply. Barbey's preference for light loading brought him into conflict with the Army view, which preferred that as much materiel as possible should be landed with the initial assault. The troops naturally, did not wish to be left stranded in enemy territory without adequate supplies.[27]

A compromise in loading was eventually reached and to provide additional warning time Barbey stationed a destroyer 50 miles up threat to act as a radar picket. Barbey's caution proved well founded. An hour after the early morning landing began, a Japanese air attack hit one beached landing craft causing 41 casualties, while a near miss severely damaged another. Both ships had to be abandoned. However, this was not the end of Barbey's troubles. Despite the light loading of his ships, insufficient troops had been allotted to unload the bulk supplies and much work had to be done by the ship's crews. It was mid-afternoon before the last landing craft got away from the beach. Another air raid hit the second landing group and another two landing ships were damaged. Casualties this time were more severe, almost 200 killed, wounded and missing.[28]

A similar pattern was repeated during the second Australian landing at Finschhafen. Barbey still feared that air attacks might reduce the small number of ships he had at his disposal and wished the landing to take place by moonlight, with the ships unloaded before dawn. The Australian commanders opposed the timing because they doubted the Navy's ability to put troops ashore at the right place and in good order in darkness. A compromise time of one hour before daylight was reached by reducing the amount of supplies landed, and allocating 200 men to each of the six LSTs for unloading.[29] The night before the operation, reports by coastwatchers of Japanese aircraft approaching almost caused a postponement, but Barbey eventually agreed to go on.

Lack of air cover became Barbey's primary preoccupation during his 1943 landings. US Navy aircraft carriers were not, as a rule, allocated to the SWPA and Barbey was reliant on the Allied Air Forces for all air support. In several of his subsequent assaults he lost both landing ships and destroyers to enemy air attack. Barbey relayed his concerns back to Kinkaid. At a conference with MacArthur in late 1943, Kinkaid made the observation that while the Navy tried to keep a combat air patrol over an objective, the Air Force instead kept its planes on ground alert until it learned of a possible attack. MacArthur apparently agreed and assured Kinkaid that in future Barbey would have adequate air cover.[30] However, it was not until March 1944, during the Hollandia operations that Barbey himself at last felt planning liaison with the Air Force was satisfactory.[31]

By the time of the Borneo landings in 1945, the balance had swung so far away from the Japanese that assaults encountered little air and virtually no sea opposition. This occurred despite the sacrifice of surprise to allow extensive preparation of the beaches. The only hostile naval forces expected were light suicide craft and submarines. However, to be certain there could be no undetected approach by enemy forces, friendly naval aircraft provided continuous air searches while surface patrols were established on all the sea approaches to Borneo. In addition, submarines provided an offensive reconnaissance capability off distant enemy bases in Java and Singapore.

Having taken enemy interference from the sea and air into account, the next step was to turn to the landing area itself. Since enemy defences were invariably concentrated around ports, assaults were normally planned to take place on an open stretch of beach. One of the many

unique problems confronting planners in the Pacific theatres was that outside the principal ports knowledge of the coastal approaches was very poor.[32] Preliminary surveys by a hydrographic team were therefore vital in plotting navigational features, charting and marking sand and mud bars, rocks and coral outcrops. Hydrographic ships would also buoy and sound the assault approach channels just before the actual landing.[33]

Beach reconnaissance was also essential to determine details, including gradient, type of beach, enemy defences and vehicle exits. The influence of tides was an obvious difference between amphibious assaults in the Pacific and in Europe. At Normandy, the assault was made at low water to expose the German obstacles. In the SWPA, man-made obstacles were only encountered in Borneo and the assaults were usually at high water to avoid mud flats. Ships in the Pacific, therefore, had to be lightly loaded and correctly trimmed so that they would not be left stranded on a falling tide.[34] Again existing data on tidal range and times was usually inaccurate and had to be specially obtained.

Though often forgotten, minesweeping was one of the most difficult of operations confronting the assault preparations. Minefields were not regularly used by the Japanese in the defence of New Guinea but in Borneo they posed special problems. The approach channels to the beaches were often narrow and could be blocked with relatively few mines. A swept channel therefore had to be cleared before warships could commence bombardment, and before the assault convoy could approach.

The minefields at Balikpapan were undoubtedly the worst encountered. The mines used were a combination of Dutch, Japanese, American and Australian, and of both contact and influence types. Many of these were laid during the successful Allied offensive mining campaign that had forced the Japanese to abandon Balikpapan as an assembly port in December 1944. Unfortunately, because the strategic plan had remained flexible up to the last moment, the minelaying plan had not been integrated in the overall campaign for the theatre. The mines had been laid without sterilisers. This oversight meant that sixteen days minesweeping was required before other tasks could commence, with the minesweepers well within range of Japanese guns.[35] Coastal batteries, however, were only part of the problem. Strong currents, shallow depths, high tides and poor navigational markings made sweeping particularly difficult. Many of the influence mines were extremely sophisticated, fitted with ship counters, and needed up to seven sweeps to detonate. The contact mines were fitted with heavy chains and caused great losses in sweeping gear. The minesweepers suffered heavily, both from the physical dangers and the stress involved in the operation. In total, five minesweepers were sunk and 12 damaged.[36] Even with this effort mines remained a hazard during and after the landing and accounted for several landing craft.[37]

The importance of 'softening up' the landing beaches grew with each amphibious operation. For the first landings at Lae, where Allied forces were weak, surprise was vital. The five available destroyers provided only six minutes of dispersed fire.[38] In contrast, at Balikpapan aerial bombardment commenced 30 days before the assault while naval bombardment began two weeks later. Not surprisingly, Tokyo Radio was very soon accurately forecasting the next target for invasion.[39]

The naval bombardment was split into several distinct periods. At Tarakan a preliminary bombardment began three days before the landing. Targets selected being oil tanks, barracks, known gun positions, suspected wireless and radar stations, and supply areas. Cruisers were given prescribed target areas while destroyers were available at the Fire Support Commander's discretion in coordination with air strikes.[40] The day before the landing, bombardment shifted to direct support of obstacle breaching operations. Here harassing fire was used, ranging initially being directed onto the beach before the swimmers landed, and then afterwards lifted into the surrounding jungle at increased rates of fire. Unfortunately, at Tarakan delays clearing the minefields made it difficult to reach effective ranges and the preliminary bombardments were scaled down. Increased allowances were fired during the actual landing to compensate.[41]

All preparations in the landing area came under the control of the Fire Support and Covering Group Commander until the arrival of the assault convoy on invasion day. At Balikpapan the Fire Support Group combined with the detached units of the Attack Group with a joint mission to destroy enemy personnel, defences, installations and facilities by gunfire, air attack, mine-sweeping and underwater demolition.[42] In his report on the operation Rear-Admiral Riggs described his wide-ranging responsibilities as follows:

> In addition to coordinating the minesweeping, underwater demolition work and motor torpedo boat patrols, this Task Group furnished fighter direction, coordinated bombing strikes, made aerial observations and close anti-submarine aerial patrols and directed activities of service units brought forward for fuel and ammunition replenishment.[43]

A few hours before the actual landing a very heavy pre-assault bombardment would be conducted against designated target areas, emphasis being placed on the destruction of enemy gun positions within 400 yards of the beach. Cruiser aircraft were allocated for spotting, though it was not unusual for the thick pall of smoke over the beaches to make observation difficult. In Borneo the assault area was gridded and bombardment directed on to the grid square rather than a specific feature. Once the initial rounds were spotted onto the designated portion of a target area the fire was distributed to cover the remainder. Scheduled fire usually ceased five minutes before the first assault wave landed but sometimes continued for 15 minutes after the landing. Fire at this stage being shifted to targets between 400 and 800 yards inland, on the flanks and creeping ahead of the advancing infantry.

The naval bombardment did not cease once the troops were ashore. Provision continued for either harassment fire, or a call for fire service against specific targets. Close command and control of the bombardment was obviously important to obtain maximum benefit. An Australian Army Bombardment Liaison Team was placed in each fire support ship before it engaged in a firing mission. Vice-Admiral Sir John Collins was later, somewhat flippantly, to write:

> Having escorted the soldiers safely across the ocean and put them ashore successfully, we on the ships' bridges could relax with a cup of cocoa and await calls for fire from the bombardment liaison officer (BLO) as the troops found themselves held up and wanted gunfire support.[44]

The BLO ensured effective coordination between the troops ashore and the firing ship. If available, cruiser aircraft would continue to provide air spotting during daylight firing missions while night firing was controlled entirely by Shore Fire Control Parties. From the reports of the Borneo operations it seems that fire could be accurately directed to within 900/1000 yards of friendly troops. Though there would be some variation depending on gun size, single gun salvos were normally used for ranging and registration, two gun salvos for destruction and for covering assigned target areas, and four gun salvos for neutralising enemy gun batteries.

Control of all direct air support remained in the Headquarters Ship while command was afloat. Requests for direct air support missions were passed to the Headquarters Ship by the Air Support Parties at Battalions, and any resultant missions were carried out under the orders of the Commander Support Airplanes (Afloat). Fighter direction was also carried out from the Headquarters Ship.

The invasion fleet would normally arrive off the beaches just after the scheduled naval bombardment commenced and about an hour before sunrise. Though a huge range of specialised landing vessels was developed or converted for use in amphibious operations the vessels could be roughly divided into those that could reach the assault area under their own power, and those that needed to be carried in other ships. The former category included the Landing Ship Infantry (LSI)[45], the Landing Ship Tank (LST) and Landing Ship Dock (LSD) and the larger Landing Craft Tank/Infantry (LCT/LCI). Minor landing craft such as landing craft assault and mechanised (LCA/LCM) and amphibians such as DUKWs and Landing Vehicle Tracked (LVT) were used to transport the assaulting troops or equipment from the larger ships to the beach.

Many of the craft were improvised without official approval and therefore unique to the SWPA.[46] Rocket fitted LCIs (LCI(R)), used for close support deserve particular recognition. These vessels not only provided a plunging high-explosive fire, useful against pillboxes, but could also lay smoke screens and blast passages through reefs. Their fire control arrangements were simple but effective. The rockets had a fixed range of 1200 yards and the LCI would head towards the beach ahead of the first wave of assault troops, at the same speed of approach. Every 100 yards a 12 rocket salvo would be fired until the LCI itself hit the beach. The effect was devastating and usually silenced any remaining opposition fire.

The larger landing ships would normally bring the troops to a 'lowering position', six to eight miles to seaward of the beach and outside the range of coastal artillery. Here they would anchor and lower the smaller landing craft to allow troops to transfer. The landing craft would then proceed into their allocated beach in a series of waves, leaving every few minutes from a predetermined departure line as directed by a control boat. The aim was to have the first wave 500 yards off the beach four minutes before the landing time, or H-hour. The initial waves consisted of 10-20 landing craft spread out in 'echelon' or 'line of bearing' formation. A wave leader took the centre position and was the only craft fitted with radio. He was guided into the beach by flags or radio signals and the remaining craft simply followed his lead. The importance of ensuring the wave leader beached accurately is obvious.

The navigational problems of inexperienced crews trying to make a landing in the dark, on a beach surrounded by coral, were found to be too great. Assaults were, therefore, normally scheduled for first light, just before dawn. Finschhafen was a notable exception, and provides a good example of what could go wrong if the assault plan was disrupted. This landing took place in darkness and the smoke and dust from the naval bombardment obscured the beaches still further. The assault barges had difficulty determining their landing positions. The first wave swung too far south, got badly mixed up and nearly all the barges hit the coral just in front of a Japanese pillbox. One barge carried the Naval Beach Party and its leader was killed. Wave two fared no better. Wave three was half an hour late and went in under fire that should have been suppressed by the first two waves. Distracted by the fire from ashore, the larger LCIs lowered their bow ramps too soon and the first troops had to swim. The LCIs then went in closer but continued counter fire at the shore, effectively pinning down their own troops at the waters edge.[47]

The beach was the weakest link in an opposed landing and it was on the beach that the Army and Navy had to cooperate most closely. The Navy, through the Naval Beach Commando Organisation, was responsible for running and controlling the landing craft, and for any seamanlike work on the beaches, while the Army, through the Army Beach Group, was responsible for unloading the craft and clearing the beaches of stores. Commitment of the Naval Beach Commando was ordered by the Commander of the Attack Group, Admiral Barbey or his equivalent, but they ostensibly operated under the commander of the Army Beach Group. However, because of their different areas of expertise, both services had to be prepared to give and take orders from each other.

Despite a lack of tradition in inter-service cooperation differences were gradually ironed out and the system seems to have worked well. After Tarakan, the RANs Principal Beachmaster (PBM) had this to say about his Army counterpart:

> I cannot stress too highly the complete harmony that existed throughout the operation with 2nd Australian Beach Group Commander Colonel CR Hodgson.[48]

Colonel Hodgson, though supportive, had a slightly different outlook:

> Navy and Army Beach Control authorities worked fairly well together but it is evident that the RAN Commando will never become completely reconciled to a shore role under army command.[49]

The PBM was the senior naval representative on the beach. At the commencement of an assault, he would usually be in the control boat next to the departure line. The advanced elements of the Beach Commando would go ashore in the first or second assault wave and would immediately erect signs and markers to delineate the extent of the different beaches. The remainder of the Commando and the individual Beach Masters would follow in the fourth wave. As soon as possible, an Advanced Beach Group HQ would be set up in a central location with the PBM close to his Army equivalent. An extensive communications network was then set up for beach control with the Navy element alone manning up to eight different circuits.

Individual Beach Masters completed the setting up ashore, guided in the later infantry waves and then turned to control the beaching of the larger landing ships and craft. These vessels were either given a priority for unloading as part of the Army's master plan or brought in after consultation with the Beach Group Commander. If the initial assault waves had gone in correctly and the beaches were ready, the first of the LSTs would come in about one hour after the first assault wave, with additional ships following at five minute intervals. As a beaching slot became available the PBM informed the Landing Craft Control Officer afloat, who ordered the next ship in priority to weigh anchor and make its approach. When about 1000 yards out the Beach Master picked the LST up on radio and guided it in. If the beach gradient was particularly shallow these ships needed to beach on pontoons.

Keeping the operation running smoothly was not a simple matter. It was not unheard of for a crew to disappear on a sightseeing excursion while their landing craft was being unloaded. This usually resulted in either delays for follow-on craft, or the crew coming back to find their own craft high and dry on the mud.

As noted above, the Army Beach Group had sole responsibility for unloading. The time taken to unload a craft was a vital factor in the smooth operation of the beach and as the war progressed techniques developed to increase the speed. Though differences in cargo caused some variation, the 3 to 5 hours taken to unload an LST in some early exercises was reduced to less than an hour for most of the later operations.

The Brunei Bay landing was a notable exception. Here, there were no existing exits from the beach to the lateral road. There was also a severe shortage of bulldozers or other mechanical equipment to make the exits in the initial waves. This shortage created huge delays. Ninety minutes after the assault began there were seven LSTs beached with no possibility of unloading until exits could be made safe and earth ramps built to connect pontoons to the shore. Problems were compounded when the later LCTs were called in to beach with the tide rapidly going out. The LCTs found it impossible to unload because the water gap was too great and the mud too soft to allow vehicles to cross. Not until the day after the landing were the first of these craft unloaded.

Order and method of loading stores also made a great difference. The Army Beach Group needed to maintain close liaison with the Military Landing Groups to ensure the distribution of force stores and equipment in the shipping followed the landing priorities demanded. Again at Brunei Bay, there were many incidents of poor loading. One LCT took a record three days to unload because its stores had been haphazardly dumped in the craft and required sorting on a narrow pontoon causeway.[50] Many other stores were net loaded but once the craft had beached it proved impossible to get a crane to the piers. The piers were already dangerously listing under the weight of accumulated stores, and unloading had to be all done by hand. Even when unloading began it sometimes occurred that the wrong cargo was landed. The RAAF came in for particular criticism for requiring excessively elaborate equipment in the early stages of an assault. One report noted that 500 pound bombs and fabricated latrines should not have been classed as assault day stores.

Once the beachhead was secure, command of the operation would pass from the Attack Force Commander to the Landing Force Commander, the exact time of the transfer being agreed in consultation between the two principal Commanders, and announced to all by radio. Simultaneously, control of direct air support was meant to pass ashore from the

Headquarters ship, but in practice this was often delayed. At Tarakan, control of air activity remained afloat until 1700 on the second day after the landing, while at Brunei Bay it was the afternoon of the fifth day before control was transferred.[51]

With the assault completed and command transferred, direct naval support tended to diminish in visibility, though units remained available if necessary to destroy enemy surface forces or deny the movement by sea of hostile reinforcements. Commander Attack Force continued to have responsibility for the transport of Allied reinforcements and resupply until piers had been built and it was safe for these duties to be taken over by the US Army Service of Supply with civilian manned freighters.

The Fire Support and Covering Group, meanwhile, continued to provide naval gunfire support according to the speed of advance of friendly troops and other missions allocated. At Balikpapan, for example, naval gunfire continued for over a week after the landing, though only 13,850 shells were fired during this period compared to 17,250 in the opening stage. Night-time harassing fire was reportedly particularly successful. The starshell used illuminated no-mans land so effectively that the Japanese made few attempts at infiltration.[52]

Unfortunately, and perhaps because it was less visible, as the Balikpapan beachhead expanded, fire control was increasingly poorly handled. HMAS *Shropshire*, a heavy cruiser with eight inch guns, reported later that she had experienced long delays and a lack of coordination from ashore. She also reported considerable difficulty in obtaining spotting aircraft, an essential requirement for the effective use of heavy naval gunfire at long range. To *Shropshire*, it appeared that the limited number of aircraft allocated by the Army were being used for other purposes, including observation of fire from less effective five inch and 25 pounder batteries.[53]

To conclude, the purpose of amphibious operations is to project combat power across a sea gap. In his 56 assault landings in the SWPA, Barbey moved over a million men overwater on schedule, constantly ensuring that the Japanese were either outmanoeuvred or bypassed. From mid-1943 maritime forces were thus central to MacArthur's campaigns, playing the 'enabling' role in allowing these campaigns to take place.

Particularly during the initial operations, the failure of the three services to cooperate to the fullest extent provided conditions that could easily have led to disaster. Amphibious landings are inherently hazardous, they require thorough planning and preparation, and there is no place for inter-service bickering. However, that the operations were successful reflects great credit on the forces that were established and trained to accomplish the mission. The mistakes and problems that occurred were almost invariably the result of a failure to communicate.

Admiral Barbey had a few simple rules that appear to have stood the test of time in conducting amphibious operations. Barbey insisted upon: thorough training, simple language in operations orders, landing where the enemy was not, continuous air and naval coverage and quick unloading of only those essentials needed on a beach.[54] Amphibious forces are inherently flexible, and if there is a single lesson to be learnt from the amphibious operations of the past 90 years it is that, if properly prepared, an amphibious assault phase usually succeeds and at a relatively small cost.

Question and Answer Session

Lieutenant Colonel Glenn Wahlert

You mentioned the Beach Masters. Could you please indicate who commanded this organisation?

David Stevens

The Navy provided the Beach Masters. The Army provided the Army Beach Group in the Borneo landings, and that was the Royal Australian Navy providing the Beach Commando. In the New Guinea landings the Americans provided the Beach organisations. They actually came under Admiral Barbey's attack group structure, and were committed by him, but they worked underneath the Army Beach Group and hence the need for cooperation between the Army and the Navy in that area.

General Broadbent

I had an experience in relation to the landing at Scarlet Beach, Finschhafen. The manner in which we landed was very distressing. I was designated to be in charge of the Beach Administrative Area and, as I got less than four days warning before we were ashore, I could not hold an Orders Group with the heads of the administrative units. I did, however, issue them with a diagram of the proposed layout of the beach area which gave them at least some indication of where they would all be. The landing was made in the dark. The Brigadier argued about it, but it still ended up being done in the dark.

I found myself scrambling to get down to the landing barge and away we went. There were four barges from each ship, making sixteen in all. All around us it was like a great carnival, very exhilarating, and a few tail lights from our shells could be seen going in the right direction. As we got closer, the number three craft—counting off from the right—veered to the left and it continued to do so. There was no means of communicating with anybody. In effect, only the two right hand craft landed in the right place at the northern end of the beach. The subsequent happenings were these: an American naval chap, who had the lamp Red or Scarlet for the name of that beach, was on the same craft that I was on. I knew that there would be no guidance for the follow up of the first wave of LCIs, nor for the next row for that matter. I got off and more or less dragged him around because I could tell where we were despite the darkness. We searched around past the little cove that was beyond the end of the intended landing beach, along to the correct place where I got him to show the light. On the way around we passed the first wave of LCI people being landed. They could be seen in the night light, drifting in towards the shore, quite contrary to the standard requirement of run your bow up onto the beach with your anchor out the back and keep pushing forward. I do not think it was altogether their fault; they had no mark, no guidance to where to go because of this error. Just drifting in by the landing craft had further consequences; their bow was not securely on ground so the stern was floating. This meant that as the troops ran down the ramps it set in motion a rocking that 'walked' the craft back off the beach. I could see the third wave beyond drifting around and uncertain as to where they were going. We managed to shine the light in the right place, and they came in onto the correct beach. But again, they did not run their craft up sufficiently. Well, I would like to have found subsequently the Coxswain of the number three craft with my jungle studded boots on; the rest I more or less exonerated.

When they got on shore, they suddenly thought that there were snipers in the trees, which there weren't, and proceeded to open fire with all their guns. The result was that the commanding officer, who had landed in the second wave and was coming around inland, was on a little knoll some twenty or thirty yards in from the trees. He ended up with a gash across the top of his head and I have always thought that it might have been one of these Yanks. If it had been an inch lower he would have been killed. We had the comic scene of seeing the Commanding Officer with a shell dressing on and all wrapped up looking like a kid with the mumps. There is a time and place to laugh at a CO but that was not quite it.

Very fortunately, all of these soldiers matured together, soldiering for a considerable time in the Middle East. All the company commanders knew each other and with their walkie-talkies they could tell who they were and quickly sort out their positions. We had nothing of the debacle that confronted people at Gallipoli where they virtually did not know where they were and did not know where anybody else was. I was busy getting ashore and sorting out the admin units. The Yanks on the boat, and the Shore Regiment, were trying to help and had a lot of equipment pouring ashore. Well, I will leave you with the main point of all this. The beach head gets to be a very busy place and, unless you have the time to plan its development properly, all you will end up with is confusion, mayhem and a very vulnerable target.

David Stevens

The main point I wanted to make about New Guinea is really that it was a learning process. The New Guinea landings were the first; it is not surprising that stuff ups did occur. Landing in the dark was obviously one of the major ones.

Major Simpkin

Given General Broadbent's comments about landing craft coming in, and your slide of the use of pontoons, can you speak a little about how critical it was for them to use pontoons to assist landings for Australian forces? Perhaps you could then comment on the utility of pontoons today, now that we are buying LSTs.

David Stevens

Pontoons are essential in any form of amphibious landing, as part of your amphibious forces, because you will always come across a situation where your beach has not got the right gradient so that the ship can come in and land direct on the beach. Particularly in Borneo they found that because the beaches were muds flats and there was a huge tidal range, without pontoons nobody was going to get ashore. As I understand it, the ability to carry pontoons is being included in the requirements for the THSS's (Training and Helicopter Support Ships). I could be corrected on that. So we still have that capability today.

Endnotes

1. *ADFP 12* Edn 1, p 1-1.
2. RN Historical Branch Paper 'Misbegotten Landings', dated 22 March 1994.
3. Planned Japanese Invasion of Port Moresby and Midway in 1942.
4. Planned Axis invasions of England (1940) and Malta (1942).
5. The Engineer Special Brigade was only equipped to move one Infantry brigade over a distance not exceeding 60 miles. See D Dexter, *Australia in the War of 1939-1945, The New Guinea Offensives*, Australian War Memorial, Canberra,1961, p 265.
6. From June 1943-January 1944 Allied Naval Forces SWPA comprised: TF 70 - Forces operating under command Allied Naval Forces, TF 71 - Forces based in West Australia including submarines, TF 72 - Submarines operating SE coast of Australia, TF 73 - Naval Air Units, TF 74 - Forces based in NW Australia, TF 76 - 7th Amphibious Force, TF 78 - Minesweepers, Southwest Pacific Sea Frontier.
7. See D Barbey, MacArthur's Amphibious Navy, United States Naval Institute, Annapolis Maryland, 1969, p 3.
8. Ibid, pp.46-49.
9. Ibid, p 48.
10. Ibid, pp 43-49.
11. P Coletta, 'Daniel Darbey Amphibious Warfare Expert', in W Leary (Ed), *We Shall Return!*, Kentucky University Press, Kentucky, 1988, p 213.
12. Barbey, op cit, p 59.
13. Seventh Amphibious Force FE25/A16-3 (3) of 2 June 1944 to C-In-C US Fleet, on AA(Vic) file MP1587/1/0 69E.
14. G Long, *The Final Campaigns, Australia in the War of 1939-1945*, Australian War Memorial, Canberra, 1963, p 506.
15. GHQ, SWPA memorandum dated 5 August 1943 in AA (Vic) file MP1587/1/0 74A.
16. Dexter, op cit, p 279.
17. Ibid, p 267.
18. GHQ, SWPA memorandum dated 5 August 1943 in AA (Vic) file MP1587/1/0 74A.
19. Memorandum Brigadier General Chamberlain to GHQ Chief of Staff dated 28 August 1943 in AA (Vic) file MP1587/1/0 74A.
20. See for example, Commander Seventh Amphibious Force Report of the Saidor Operation, dated 3 February 1944, in AA (Vic) file MP1587/1/081.
21. See Long, op cit, p 411 and, Rehearsal for Brown Beach Landings Operation OBOE SIX, undated on AA (Vic) file MP 1587/1/0 62F.
22. 'The Assault on Brown Beach, Operation OBOE SIX, undated on AA (Vic) file MP 1587/1/9/ 62F.
23. Commonly known as a 'large, slow target'.
24. Operation OBOE SIX Detailed Report, undated on AA (Vic) file MP1587/1/0 60A.
25. Even in recent times, this lesson has needed to be relearned The problem of inexperienced troops suffering severe sea-sickness caused weather limiting constraints for ships during Operation MORRIS DANCE. See Operation MORRIS DANCE - MHQ Report to HQADF dated 18 July 1989.
26. Barbey, op cit, p 74.
27. The Australian commander, Major-General Wooten, emphasised the need for at least 10 days reserve rations, See Dexter, op cit, p 274.
28. G Herman Gill, *RAN 1942-45, Australia in the War of 1939-45*, William Collins, Sydney, 1985, p 329.
29. EG Keogh, *South-West Pacific 1941-45,* Gray Flower Productions, Melbourne, 1965, p 316.
30. Coletta, op cit, p 221.
31. Barbey, op cit, p 161.
32. To quote just one example, the charts covering Finschhafen were found to be eleven miles in error. See Barbey, op cit, p 92.
33. A boat from HMAS *Lachlan* laid marking buoys within 30 yards of the landing beach two days before the assault on Brunei Bay. See Operation OBOE SIX, Report of RAN Participation, in AA (Vic) file MP 1587/1/0 63.
34. At Tarakan the tidal range was three metres, at high-water there was no beach while at low-water there was 100 metres of deep, soft mud.
35. Staff History, War With Japan Vol VI, *The Advance to Japan*, Historical Section Admiralty 1956, p 177.
36. Casualties amongst the minesweeper crews amounted to 50 killed and wounded and another 10 classified 'mental cases'. See Naval Staff History, op cit, p 179. Of note, Barbey claimed only 272 naval casualties during the entire course of his operation, see Barbey, op cit, p ix.
37. Of contemporary Interest is a comment made after the 1991 Gulf War by the US Amphibious Task force commander: 'Any prospect of the 17,000 embarked marines storming ashore evaporated after the 17 February mine strikes on the US ships *Princeton* and *Tripoli*'. See D Evans, 'With the Army and Air Force' in *US Naval Institute Proceedings*, June 1991.
38. Dexter, op cit, p 330.
39. WN Swan, *Spearheads of Invasion*, Angus and Robertson, Sydney, 1953, p 272.

40. For example, two days before the Tarakan landing HMAS *Hobart* carried out 6 inch bombardment of target areas reported previously as containing anti-aircraft batteries. On one task, firing at a range of 19,000 yards, *Hobart* expended 37 rounds, scoring a direct hit on one gun. Operation OBOE ONE, Report of RAN participation in AA (Vic) file MP1587/1/0 63.
41. Naval Staff History, op cit, p 171.
42. Commander TG74.2 Action Report, Close Cover and Support Group - Balikpapan, Borneo 13 June - 2 July 1945, dated 8 July 1945 in AA (Vic) file MP 1587/1 /0 60D.
43. Ibid.
44. J Collins, *As Luck Would Have It*, Angus and Robertson, Sydney, 1965, p 137.
45. Notably, the RAN ships *Westralia*, *Manoora* and *Kanimbla*.
46. These craft included LSTs converted to a 'first-aid' ship, water barges, 'repair ships' and 'casualty ships' and small coastal transports converted to LCT tenders, a mobile 'planning' ship and a 'post-office'.
47. Keogh, op cit, p 318.
48. Report by Principal Beachmaster 'B' dated 8 June 1945 to SNO Beach Unit on AA (Vic) file MP 1587/1/0 60A.
49. Ibid.
50. Ibid.
51. Tarakan Campaign narrative dated 3 November 1945 in AA (Vic) file MP1587/1/0 61E and CTG 74.3 Action Report, Brunei Bay dated 20 June 1945, on AA (Vic) file MP 1587/1/0 62E.
52. HMAS *Shropshire*, fired starshell at the rate of five rounds per hour. See Long, op cit, p .519.
53. Commodore J Collins, CTG 74.1 letter to CinC US Fleet dated 30 July 1915 in AA (Vic) file MP 1587/1/0 60.
54. Colletta, op cit, p 242.