THE
NORTHERN TERRITORY
COAST

by

John Knight
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INTRODUCTION

This paper is the text of a talk given by John Knight on 7 March, 1990 in the State Library's 'Under the Banyan Tree' series of lunchtime entertainments.

In a young, outdoor-loving community such as Darwin, the proportion of boating enthusiasts must be higher than in the rest of Australia. Virtually every Court and Place in Darwin and Palmerston counts at least one house with a boat in the yard. Add to this the accepted unreliability of our charts, the treacherousness of the Territory's coast, and you have the classic ingredients of tragedy.

This is why John Knight's book "The Northern Territory coast" was welcomed by local mariners, professional and weekend alike. In this talk he outlines for us briefly the history of exploration and activity along the coast, and then speaks of the problems and dangers navigators along this stretch of coast face. It is a familiar story to those hardy souls who 'go down to the sea in boats', but a real eye-opener to the rest of us landlubbers.
THE NORTHERN TERRITORY COAST

by

John Knight

I became the author of the "Northern Territory Coast" more by accident than design. I knew there was a lack of readily available information about the maritime environment of the Northern Territory from the navigational point of view, and, due to various "accidents", I happened to possess a substantial amount of the necessary knowledge. Before becoming involved with Education I had a seven year career at sea during which I qualified as a Deck Officer/Navigator in the British Merchant Navy. I am also involved in small boat sailing, and lecturing in coastal and ocean navigation at the Northern Territory University to adult evening classes, and sometime to the Darwin Sailing Club.

I wrote a booklet called "Top End Navigation" covering Darwin and nearby waters in 1978. This sold cheaply and cost very little as the advertisers paid the bills. But there were difficulties in selling it from outlets which did not advertise in it.

This success made me think perhaps I could expand and describe the whole Territory coast. I had made a few voyages on the coastal barges with Barge Express and V B Perkins so I had seen, at least fleetingly, a proportion of the coast. I had been as far east as Groote Eylandt and west to the Kimberleys, as well as a foray up the Victoria River. I had even been Skipper of the vessel on one voyage. I assiduously picked the brains of every person who had made a voyage along the coast for information. Many seamen I sailed with knew far more about the coast than I, but they were not of a "literary turn of mind". However, I owe them a debt for the help and advice freely given over many years, and particularly as I began to write. It takes a while to put a book together and this one took five years from the first sentence to completion and publication.

A large body of information had to be located and catalogued. Few people have ever visited long stretches of the coast, so first-hand reports are few. The University of Sydney crocodile survey, although interested in other things, provided limited information about waterways across the Top End not described elsewhere. This filled in gaps left by *Australia Pilot*


Volume V, which generally discourages approaching the coast, being intended to advise deep sea shipping. The Northern Territory Department of Lands was a happy hunting ground as they have an extensive library of aerial photographs. Unfortunately they are generally shot for land use and stop immediately they reach the coast. They also do not pick the tides and calculation is necessary to ensure that you are not missing some detail that will be exposed as the tide falls. This preparatory work took several years, including a whole month's annual holiday in Moonta House tracing photos. It cost money too, purchasing Australian survey maps of all areas which were not well covered on the sea charts. As I progressed I incorporated all the various pieces of information into prose and drew sketch maps which were later turned into the polished results in the book by a local cartographer.

The result, after four years, was turned into a book by Image Offset of Darwin. They have been a terrific help with the project and currently are rebinding the book to overcome a problem with nontropical glue. A $20 000 bank loan was the major part of a total cost around $29 000 for 4 000 copies. Selling has involved repeated forms of advertising, keeping an eye on the supplies in local outlets, and even writing newspaper articles to keep it in the public eye. I do not expect to make a profit but may cover costs in 6-8 years if the cockroaches do not eat the stock first. Certainly investing what it cost would already have made better financial sense.

My wife suggests that it was a bit of an ego trip. It is difficult to argue. It is not modest expecting people to pay to read your words. I am interested in the Northern Territory coast not only as a navigator but also for its past and its present. The fascination of the unknown and the remote is here on our doorstep. If the opportunity arises I delight in pottering around the creeks, bays, islands and rivers for the pleasure of just of seeing them.

The coast of the Northern Territory represents one of the most remote parts of the world. Sparsely populated, it is still the haunt of wildlife displaced from other areas of Australia and the world. It is home to crocodiles, endangered bird species and numbers of rare land creatures. It is a dangerous place for the careless or unaware traveller, with a long list of hazardous creatures which bite, sting or spike the unfortunate visitor. Even today it lacks the protective infrastructure that cocoons man's safaris in other places. Along the Northern Territory coast you can still get yourself into a great deal of trouble by the failure to obey basic safety rules and maintain your means of transport. Each year people are rescued, often more by accident than design due to the lack of adequate safety organisations, from remote corners of this area.
The Australian Pilot Vol. V., in giving a definition of the coast, describes it as "principally sandy beaches and mangrove-fringed mud flats, indented with bays and inlets and estuaries of numerous rivers and creeks". Stretching 900 nautical miles (1,650 km) from the Queensland to the West Australian borders it covers 9° of longitude. However, the key issue for the traveller is that most of this distance is a vast, wild land without major settlements and its few inhabitants nomads who are a presence which cannot be relied on.

These nomads are the successors to the countless generations of Aborigines who have dwelt in the region as hunter gatherer. The coastal fringe and the tropical inland provided easy pickings with a succession of different foods for collection throughout the year. Naturally fertile, with areas of luxuriant tropical jungle, it provided an area suitable for a relatively dense population compared with most of this arid continent.

For over the 50,000 years the change of the seasons has seen Aborigines hunting the marine resources along the coast, or on "walkabout" in the savanna forest gathering "bush tucker" and herbal medicines or the materials to make religious objects, utensils and weapons. The coasts and estuaries provide fish, turtles and their eggs, shellfish, crustaceans, sharks, stingrays, seabirds and dugong. In swampland they hunt magpie geese and brolga, or dig in the shallow waters for the corms of water grass and lily. Rivers provide freshwater fish, tortoises and crustaceans. Inland they hunt wallaby, emu, goannas and other lizards. The fruits, berries and nuts of many plants and trees are gathered, as is the wild honey. Like similar hunter gatherers of the world, such as the Eskimos, the Australian Aborigines have a rich vocabulary to describe the complexities of the natural world. Many small variants in nature are specifically identified, ensuring a clear idea of the importance of creatures and plants as a food source and the avoidance of inedible and poisonous material. The Aboriginal year is dominated by the changing growth patterns of the plants and animals. His knowledge of his environment in the smallest detail is far ahead of our modern scientists who still have much to examine and quantify.

The Aborigine does not live on the land as do most European Australians, but is aware of himself as an integral part of it. Along the Northern Territory coast this is evidenced by a strong cultural affinity with the land. It is demonstrated by the continuance of traditional "ceremonies" and the survival of Aboriginal art and custom. Large areas of the Territory are part of the Arnhem Land Aboriginal Reserve, separated by government policy that recognises the need for Aboriginal guardianship of the ancestral land. There are the sacred sites where the remote ancestors of the "Dreamtime" touched the land with supernatural acts creating the landscape and providing explanation for unique elements of the natural world. In other places mythical
superhumans lived out events which relate the current inhabitants to a remote past. There are source areas for particular food supplies or products such as ochre. Whether it is the significance of a bay or a rock to the stories of the past or the pattern of kinship controlling clan and family interaction, the Northern Territory Aborigine lives as part of a rich and enduring culture.

The Aborigine of the Northern Territory coast was not solely a mystic. Survival required an intimate practical knowledge of the environment. He knew, in great detail, his land, its products, foodstuffs and hazards. The traveller by sea must always be cautious and aware of weather, swift tides and exposed headlands, particularly if his craft is a small canoe. Today, at the head of Popham Bay a dinghy can be taken through the shady depths of the mangrove swamp into Van Diemen Gulf, bypassing the treacherous tide rips of Cape Don. Removing fallen branches to unblock the way, a dinghy may follow in the wake of past canoes. Clear flowing water over sand and coral wends its way along this short cut below the green canopy.

Everywhere along the coast you crunch underfoot the huge shell "middens", Aboriginal garbage tips, where countless centuries of shellfish feasts have left mounds so extensive that you might think them a natural feature, part of a remote fossil past, rather than the result of human activity.

The first inhabitants had this coast to themselves for many thousands of years. Each year they continued their seasonal round exploiting the natural products of their tribal area. The Aborigines were generally peaceful with a system that kept each tribal group in its own area with little friction. It depended on a system of religious, social and economic values which was accepted and respected by surrounding tribal groups. Elsewhere in the world others were not so content. Europeans had a history of conquering the local neighbourhood and extending to displace other peoples across the world. Each nation sought power and wealth, accompanying personal and national greed with crusading religious and moral motives. Fortunately, in Northern Australia, the harshness of nature slowed the advance of European colonialism.

The Aborigines, in not acquiring a detailed recording system, leave very few records of the effect of the first tentative contacts with strangers. Some indications can be gleaned from the occasional cave painting which includes foreign vessels and foreigners, but the stylised depiction used does not tell us a great deal about the impact of the events.

The Europeans too were not much more forthright. Luiz Beaz de Torres came through these waters in 1601. The Spanish government hid the detailed information of his voyage in case economic competitors could use the information to travel the same way.
This has enabled modern navigators to write erudite tomes arguing about his specific route through Torres Strait.

In the same century, the Dutch, active in the East Indies, sent expeditions to search out the wealth of "Jave La Grande" to the southeast. Captain Willem van Colster aboard the "Arnhem" in 1623, after coasting part of the Cape York Peninsula, crossed the Gulf of Carpentaria and, from a distance, made the first recorded sightings by Europeans of the Northern Territory coast. He named the hazy humps of land the Arnhem and Van Speult Islands, the latter after the then Governor of Ambon. He passed through Cumberland Strait in the Wessel Islands but with his vessel in poor condition he did not stop to check on the local scenery and population. Only thirteen years later Pieter Peitersz again visited Arnhem Land to explore on behalf of the Dutch East India Company.

Still searching for the wealth of the "South Land" the Dutch tried again in 1644. Abel Tasman and Jacobsen Visscher, recently successful in discovering Tasmania and New Zealand, were sent into the region. They sailed around the Gulf of Carpentaria, recognised Van Colster's islands as the mainland and continued westward in contact with the coast as far as Melville Island. They named places such as Limmen Bight, Arnhemland, Groote Eylandt and the Crocodile Islands off Milingimbi. Obviously they sailed some distance offshore as they missed other features, for example naming Dundas Strait as Van Diemen Bay. Not that you could blame them with unwieldy wind driven vessels and only eyesight to detect the hazards of reefs and shoals in unknown murky waters. Tasman continued west past the North West Cape of Western Australia before returning to Batavia. No new rich trade was discovered and interest waned.

Dutch interest was only revitalised when the publication of "A Voyage to New Holland .. in the year 1699" by William Dampier stimulated British interest in the region. Fearing competition, or worse, colonisation by Britain, a three ship Dutch expedition, the "Vossenboch", "Nova Hollandia" and "Waaler" under Maarten van Delft, spent three months in 1705 travelling eastward along the North Australian coast. Disease and sickness decimated their crews forcing van Delft to return with no new sources of wealth or trade. The exploration by Lieutenant Jean Etienne Gonzal in the "Rijder" to the Gulf of Carpentaria in 1755 ended Dutch interest in the Northern Territory coast. The Dutch had examined the area long before the voyage of Cook or the "First Settlement", but failing to find desirable trade and with their power in decline, they left the region to other nations.

The Europeans were not alone in seeking commercial advantage along the Northern Territory coast. Around the year 1700 trepangers from Macassar in Indonesia began an annual harvest of the sea slug. This continued until 1906 when licence costs caused the collapse of the trade. They sailed east with the Wet
as far as Groote Eylandt, harvesting the sea slug from shallow waters along sandy beaches. The grey and black banana-shaped sea slug is still there today, but its aphrodisiac properties are not the stimulus to trade they once were. The Macassans’ passing is still marked by the remains of stone fire places where large vats of sea slugs were boiled. Elsewhere, as at Milingimbi, they planted the huge tamarind trees near water supplies. The palm leaf smoke houses in which the slugs were cured must have been a familiar sight along the coast at the time but their remains blew away with the first storm. With the change of the monsoon the trepangers sailed west again, their vessels loaded to restock the shelves of the herbalists in distant southern China.

The first British contact with the Northern Territory coast was in 1791, twenty-one years after Cook. In that year Lieutenant John McCluer tacking towards Batavia from Torres Strait sighted New Year Island. His name is recorded in another island in the same group east of Croker.

In 1802-1803 a key event for the Northern Territory coast navigator took place with the voyage of Matthew Flinders. In HMS "Investigator" he surveyed and mapped the coast of the Gulf of Carpentaria and westward to the Wessel Islands. At this point the state of the ship ended further local exploration. Dangerously rotten and full of marine borers it required urgent repair. Flinders departed through the Cumberland Strait, but not before the historical meeting with the trepanger Pabassoo in Malay Roads, west of Nhulunbuy. Flinders presents a vivid picture of the skilful seamanship of these men who could travel so far in flimsy craft with minimal navigational aids. An outstanding seaman, the excellence of Flinders' chartwork is evident in unchanged depths on current charts that he sounded nearly two centuries ago.

At the same period the French were seeking new areas to add to their empire. Nicholas Baudin with two French thirty gun corvettes "Le Geographe" and "Le Naturaliste" came past in June 1803 leaving French names to mark landmarks such as Cape Fourcroy, Peron Islands and Joseph Bonaparte Gulf.

In 1818 the British sent Captain Philip Parker King to extend the survey of the north coast westward from that covered by Flinders. He discovered and named Raffles Bay and Port Essington. Identifying Dundas Strait he corrected Tasman's mistake and named Melville Island. King, victualling in Timor, picked up further rumours of Dutch plans for a settlement on the Northern Territory coast.

This international competition led in 1824 to the arrival of Captain J. J. Bremer, RN, on the Melville Island shore of Apsley Strait. His convicts and Marines established Fort Dundas close to present day Pularumpi (Garden Point). The Tiwi were unimpressed by the visitors and encouraged their departure by
frequent attacks and by stealing everything not locked away. The climate and disease also helped to keep down the numbers of the white population. But despite pessimistic reports from the settlers at Fort Dundas, in 1827 another group was sent north. This time it was Captain James Stirling, who later founded the settlement in Western Australia, with another hopeful band of unwilling visitors. Recognising that Melville Island was not a prime choice for the establishment of another fort, Stirling sailed further east to Raffles Bay. Fort Wellington was built on a hillside overlooking the bay.

Today a few crumbling walls and a dry well moulder amid thin forest along the shore. A cutting through the shore reef marks the old boat landing but there is little to show of the settlers' effort to cultivate and colonise the place. No new wealth was discovered and the expected Macassan trade by-passed both sites. Defeated, the British departed in 1828-1829. The forts were left to decay and the country reverted to the care of the original inhabitants.

The "never say die" spirit of British colonisation saw three more ships sail into Port Essington in 1839, again under the command of Captain Bremer. HMS "Alligator", "Britomart" and the store ship "Orontes" sailed towards the head of the harbour to establish the "Victoria" settlement. After building basic shelter, crops were planted and cattle kept. Even the Aborigines proved friendly. However, success evaded the settlers as disease, remoteness and ignorance of tropical agriculture rendered their efforts ineffectual. Today the visitor to the site can view the ruins of parts of several homes and public buildings as well as the stone monuments to those whose visit ended in the cemetery. The agricultural areas have been taken over by the natural woodland. The strenuous effort of clearing bushland for agriculture is marked by only an occasional heap of stones in ordered formation among the regrown scrub.

At this period of settlement from 1839-1849 there was considerable international exploration both ashore and afloat in the region. Victoria was visited by several notables including the French expedition of Dumont D'Urville on its circumnavigation. The French were impressed both with settlement and the harbour. December 3, 1845 saw Victoria as the terminus for Ludwig Leichhardt's overland trek from Queensland. At the end of fourteen months of hardship the hospitality of the settlers was a welcome relief for the men before they returned to Sydney by sea.

The Northern Territory coast itself was getting further attention. Captain J. C. Wickham and Lieutenant Lort Stokes in HMS "Beagle" made extensive surveys in 1839. One of their discoveries was Port Darwin. This event was recognised on its 150th anniversary last year when an anchor monument was erected on Talc Head. Using Port Essington as a base, the "Beagle"
discovered the Adelaide River, Clarence Strait and Bynoe Harbour. During the visit they made a full investigation of Port Darwin up to the head of Middle Arm. In October 1839 they sailed further southwest making the first ascents of the Fitzmaurice and the Victoria Rivers. The surveys were hazardous. Stokes narrowly avoided injury at Escape Cliffs, but received an Aboriginal spear in the back at Treachery Bay beyond Port Keats. They took considerable risks. Stokes almost became the first recorded European crocodile victim. On the Fitzmaurice, when fording a waterway in the face of a rapidly rising tide, he had a close shave with a saltwater crocodile who was very close behind when he climbed out of the water.

For fifteen years after the demise of Port Essington the land was again left solely to the Aborigines. But on 24 July, 1862, John MacDouall Stuart made the final push of his many attempts to cross the continent from south to north. Finally, he emerged from the scrub onto the beach of Van Diemen Gulf near present day Point Stuart. An epic journey, it took four years of successive attempts to make the complete south-north crossing.

In 1863 South Australia annexed the area of the Northern Territory from New South Wales. Having gained the land they set out to colonise and make money from the new acquisitions.

Lieutenant-Colonel Boyle Travers Finnis, ex-acting Governor and Premier of South Australia, landed at Escape Cliffs north of the mouth of the Adelaide River on 28 June, 1864. He was to mark out the blocks of land already sold to speculators and set up a colony. It proved another disaster as the chosen site was nice enough in the Dry, but cut off by vast flooded swamps on a short peninsula in the Wet. Finnis was unpopular and an epic small boat voyage to Western Australia by seven disgruntled settlers assisted the decision to replace him. On his way back to South Australia Finnis made his own discovery of the Daly River. The badly sited settlement inevitably declined and the last settlers left in 1867. Little remains in the forest above the cliffs today and whatever there was has been ravaged by amateur archaeologists or bottle hunters.

Further land exploration was also in progress with John McKinlay sent north in 1865. He left Escape Cliffs in January 1866 to cross the floodplains behind Van Diemen Gulf. After the Wet set in, the expedition became bogged in flooded swamps and barely escaped with their lives in a makeshift horsehide punt made from mangrove timber. McKinlay was scheduled to travel overland to the Liverpool River, and Captain Howard in HM Surveying Schooner "Beatrice" was supposed to pick him up there. However, with the problems of the McKinlay expedition and their non-arrival the return vessel waited in vain. They did however make a survey of the coast from Bowen Strait and Mountnorris Bay to Cape Stewart before returning empty handed.
1867 saw another Australian nautical pioneer in the Territory, Captain Francis Cadell, who opened up the River Murray navigation, used a pearling lugger to examine the Roper and Liverpool Rivers. But his mainly favourable reports were just filed and nothing resulted.

South Australia was in deep trouble over the land deals associated with the failed Escape Cliffs settlement, so in February 1869 George Woodroffe Goyder, Surveyor General, landed at Port Darwin from the barque "Moonta" to survey blocks for lease. The first settlement was at Fort Hill and a township named Palmerston grew up on the wooded clifftop area behind the landing place.

In 1871-72 more people arrived to construct the Overland Telegraph and next year gold fever struck as a result of a discovery in a telegraph pole hole near Pine Creek. Because Palmerston lacked a decent wharf and poor roads restricted inland travel, the main shipping to the goldfield sailed up Middle Arm to Southport where a few remains of settlement can be seen among the trees. Only in 1886 with the construction of the Darwin-Pine Creek Railway was a proper wharf built.

Also in the 1880s Captain Carrington examined the Northern Territory rivers from the Victoria to the Roper to check on shipping potential. But again nothing happened. Alfred Searcy as Sub-Collector of Customs also travelled the coast at this time seeking the Macassan trepangers to collect customs duty and licence fees. He left a vivid account of the coast and the trade. Unfortunately he kept watch over an impost which caused the rapid decline and demise of the industry.

Other marine activity also began in the area. Pearling started in the 1870s based on small shellfish beds in Darwin Harbour and around Melville and Bathurst Islands. A severe cyclone in 1897 decimated the pearling fleet and the industry continued with varying success into the twentieth century. Imported pearling labour from Malaya, Japan, Indonesia and Thursday Island added to a racial mix that is still well represented in Darwin's multinational population. In the 1930s Japanese mother ships exploited the Arnhem Land coast and today the Paspaley Pearling Company and other groups still culture pearls on huge floating rafts in Ports Bremer and Essington or creeks of Darwin Harbour. New licenses have been issued recently so it must have some economic potential despite the competitive nature of the industry with its world centre in Japan.

Because of the remoteness of settlement around the Northern Territory coast, the sea has always been a means of communication and transport. Pioneer cattle stations in remote areas, mission stations and remote industrial sites have all depended on sea transport. The luggers of the past have given way to the modern coastal barge which services landings from Borroloola to Port Keats on a regular schedule with foodstuffs and stores.
The sea also provides the way to export large quantities of bauxite from Gove and manganese from Alyangula on Groote Eylandt. Currently our Asian neighbours from Taiwan and Thailand are fishing local waters in co-operative ventures. There is a need to ensure that fish stocks are not overfished, as has occurred in our visitors’ home waters. Darwin has, from the beginning of its settlement, been the main port for supply of the Northern Territory as well as the export of its various products over the years. Iron ore, zinc, uranium, cattle, cement, and oil fuel pass over its wharves today or have done so at times in the past.

The Northern Territory coast has always been a place for skilled seamen able to find their way by compass, leadline and a good eye. Not all successfully. Shipwreck is an oft repeated event. The “Orontes” in 1839 went aground off Port Essington on a reef that even today is only sometimes marked by buoys. The steamer “Brisbane” became a total loss on Fish Reef in 1881 bound in to Darwin. Her remains lie close to where in 1987 a new light beacon was erected.

The first lighthouse on the coast was built at Charles Point in 1893 and the red lattice tower still stands guard over the shifting shoals off the point. Cape Don was lit in 1916. This now has an automatic light. The last keeper to reside in the high roofed houses on the clifftop was transferred away in 1983. The tricky passage past Cape Hotham through the Vernon Islands was lit and buoyed between the wars. Cape Wessel, Melville Bay and Groote Eylandt only gained lit navigational aids in the 60s and 70s as the ore export business expanded.

In 1990 it is still fair to say that larger shipping depends almost solely on radar for navigation. There are few lit aids and because of the lack of population few man-made landmarks. Shallows, shoals and reefs abound. Few are marked and many unsurveyed. Navigation is still essentially that practised by all seamen a century or more ago. Even aids like satellite navigation are a doubtful blessing when the charts are unreliable. Some places are several miles out of position. Although the Hydrographer places one or other section of the Northern Territory coast on his annual programme every year it will be well into the twenty-first century before revisions take place. It can take about ten years to upgrade the chart of an area to modern standards with the careful measurement of depth required and precision of survey essential to the task. Most recently a chart of the area from the Grose Islands to Port Keats was published. This new chart moved islands and redrew shoals but still relied on information from many years ago to cover areas out of the main routes. The whole area could not be fully and properly examined in a decade of current surveying.

My favourite example of this problems is the reef situated northwest of Maningrida. This appears in three different places on the one chart. The shoal is an oval of reef about a nautical
mile in extent, lying north-south. The coral is only about a metre below the surface on a low tide. The fishing is great. Using radar it could be deliberately located, but how many times must other vessels have sailed over it oblivious to the hazard. Most vessels are unable to accurately fix their position for long distances along the featureless north coast. All that is visible from a safe distance off the shallow shoreline is a hazy line of the low, distant coast. The area from Cape Don to Cape Wessel is within the current naval survey area so before too long we should have a pleasantly coloured chart with the shoal in its correct position.

The Northern Territory coast is also interesting because of its varying patterns of tides. The vertical movement of seas due to gravitational effect, mainly of the sun and moon, is seen in a variety of modes. In the east the Gulf of Carpentaria has a basic pattern of one tide a day, while in the west the pattern of two tides per day is found. Considerable differences are found between successive high tides or low tides due to the varying effects of the relative positions of the celestial bodies.

These complex forces combine to produce 8 metre tides in Darwin and a 2 to 2.5 metre rise and fall on the northern side of Melville Island. The differences promote rapid transfers of water as the tide rises and falls and intricate patterns of changing current rates where the tides at opposite ends of bodies of water do not coincide. In Howard Channel, for example, flows of up to 6.4 knots cause major water disturbance. Passing through becalmed on a moonless night a yacht gets dragged inexorably into a succession of roaring tumbling breakers caused by current passing at speed over the uneven sea-bed. Off Cape Don similar rates turn Dundas Strait into a seething cauldron of two metre swells and breakers when rising tide opposes the mid-morning strength of the southeaster. On the other hand at Numbulwar in the Gulf a negligible tide over several days can leave a vessel hard aground dependent on a change of wind to push the water against the land and lift it off.

The changing monsoons also add variety to the picture. The variability of tropical weather often makes a mockery of the "average" conditions. The considerable extent of the coast also ensures a wide range of differing weather conditions on any specific day. Sailing along the coast you need a continuous eye on what is happening to avoid getting caught in bad weather on a shallow lee shore. In the current Wet Season a trimaran was lost east of Maningrida when swept onto the shore banks off the Blyth River by a developing cyclone.

The weather in the Gulf is often totally different from that in Darwin or off the Victoria River. One trip across the Top at the height of the Dry, when Darwin had seen no rain for three months, the passage from Torres Strait to New Year Island was through a succession of rain squalls under grey skies. As most of the
seafaring is done in the Dry Season the popular places are all those protected from the southeast winds. The land has unfortunately not provided too many of these near Darwin.

Those anchorages, useful to small craft, which do exist are not generally surveyed. The best I could do was to use aerial photographs, the landmaps and experience to make sketchmaps. Even a visit provides insufficient reliable information. All you can say after a trouble free visit is that on the particular track used you did not hit anything under the tidal conditions of the time. It is a small improvement on no information at all but the utmost care must still be taken when you visit.

It is a concern that what few protected anchorages there are may cease to be available to the general public. Military areas are extensive, Aboriginal lands continue to be enlarged, Aborigines are applying for closed waters for traditional use, pearling licences extend the area of waters restricted by shell rafts, tourist operators seek closed waters for their operations and private landholders discourage visits. Perhaps in the mid 21st century seamen will have very few places open to them and find an extensive web of rules and regulations to constrain their activities. In some aspects this could be an improvement restricting the activities of the unskilled and inconsiderate but it would be a pity if a competent seaman in a well found vessel could not cruise along the coast and sample the peace of the area.

There are many changes taking place along the Northern Territory coast as new navigation aids are installed, new charts printed or new developments take place. I have included a regularly updated supplement in my book to cope with these changes. It already runs to four pages. It is difficult to find up-to-date information but is essential if a reference publication is to be of use to the current user.

I hope that my efforts will enable more people to enjoy the Northern Territory coast either through a visit or reading of this fascinating, wild and remote part of Australia. If they do I am sure they will share my enthusiasm for the area.