





Published by Adlard Coles Nautical an imprint of Bloomsbury Publishing Plc 50 Bedford Square, London WC1B 3DP www.adlardcoles.com

Copyright © Alastair Buchan 2013

First published by Adlard Coles Nautical in 2013

ISBN 978-1-4081-7914-7 ePDF 978-1-4081-7915-4 ePub 978-1-4081-7913-0

All rights reserved. No part of this publication may be reproduced in any form or by any means – graphic, electronic or mechanical, including photocopying, recording, taping or information storage and retrieval systems – without the prior permission in writing of the publishers.

The right of the author to be identified as the author of this work has been asserted by him in accordance with the Copyright, Designs and Patents Act, 1988.

A CIP catalogue record for this book is available from the British Library.

Typeset in URWGroteskTLig 10pt on 13pt by Margaret Brain

Note: while all reasonable care has been taken in the publication of this book, the publisher takes no responsibility for the use of the methods or products described in the book.

ALASTAIR BUCHAN

PASSAGE MADE PERFECT

ADLARD COLES NAUTICAL

B L O O M S B U R Y LONDON • NEW DELHI • NEW YORK • SYDNEY

Acknowledgements

In helping me write this book I would particularly wish to thank Keith Banks who read and corrected the early drafts of Part One. I also owe a vote of thanks to Bill and George Ross who patiently listened to what I had to say on this subject and corrected my wilder views before they reached paper. Thanks are also due to the many friends and sailing acquaintances who I surreptitiously used as sounding boards who probably wondered why I was forever bringing conversation round to passage making but nevertheless helped me firm up my ideas and how to present them.

Sadly they cannot take the responsibility for any errors and omissions, that remains with me.

As always, a huge thanks goes to my wife who uncomplainingly reads through the text correcting my poor grammar and careless mistakes.

Thanks also to Liz Multon, Jenny Clark and Jenni Davis, my editors, and Mark Silver, the illustrator, a great team who have done a brilliant job of converting a collection of words, figures and pictures into a readable book.

Dedication

This book is dedicated to D J Thurm with the hope that one day he may read it.

CONTENTS

20 Safety at sea

21 Supplies

| Intr | oduction | 6 | PART THREE EXECUTION AND SAMPLE PASSAGES | |
|-----------|-----------------------------|-------|------------------------------------------|-----|
| PA | RT ONE THE THEORY | | 22 Executing your plan | 168 |
| 1 | Achieving your goal | 16 | 23 Sample passages | 177 |
| 2 | Making a plan | 25 | 24 Round the bay | 179 |
| 3 | Data and information | 30 | 25 Short coastal passages | 183 |
| 4 | What you need to know | 40 | 26 Long coastal passages | 188 |
| 5 | Timings and timetable | 44 | 27 Short offshore passages | 192 |
| 6 | Decision making | 51 | 28 Long offshore passages | 196 |
| | | | 29 Ocean passages | 201 |
| PA | RT TWO ELEMENTS | | 30 Inland waterways | 209 |
| OF | PLANNING | | 31 Envoi | 215 |
| 7 | Introduction | 62 | | |
| 8 | The boat above decks | 64 | Appendix: Pre-sail checklist | 217 |
| 9 | The boat below decks | 73 | Index | 223 |
| 10 | Administration | 79 | | |
| 11 | Communications | 88 | | |
| 12 | The crew | 96 35 | | |
| 13 | Power plants and propellers | 105 | | |
| 14 | Generators | 111 | | |
| 15 | Medical and health | 116 | | |
| 16 | Instrumentation | 121 | | |
| 17 | Tides and weather | 124 | | |
| 18 | Routeing: the route plan | 135 | | |
| 10 | Poutings and daily shocks | 150 | | |

154

164



INTRODUCTION

There appears to be no generally accepted definition of passage making, but we use the term assuming everyone knows exactly what we mean by it. The closest definition comes from the website of Taylor Made Systems of Gloversville USA, which says that 'passage making is long-distance cruising'. Its simplicity is then ruined when they go on to describe ocean passage making as 'offshore, either on the ocean or large lake'. In his book *Cruising Boat Sailing*, Bob Bond describes a passage as 'longer than the usual coastal hops and usually involving days and nights at sea', which will disappoint those who happily describe their voyages from our shores to Ireland, France, the Low Countries, Germany and Scandinavia as a 'passage' although these crossings rarely involve 'days and nights at sea'. Elsewhere I discovered that a passage maker is 'a sturdy seagoing vessel, capable of handling large seas, and fitted for voyages to distant ports' (Seatalk Nautical Dictionary: www.seatalk.info) which, depending on your definition of 'distant', could involve ocean voyages.

Running through all these definitions is a sense that passage making is an activity involving sailing further than your usual voyages, whether they be ten miles or a thousand. In fact, passage making is a broad church, offering different activities to different people. Your boat can be a fishing or diving platform, a floating bird-watching hide, the marine equivalent of the garden shed where you escape the travails of everyday life, a floating caravan, or a magic carpet that carries you to new lands and enchanted worlds. Not all of these activities necessarily involve overnight sailing or crossing oceans. No one ever forgets their first entry into a strange port, even if it is only a handful of miles along the coast from home. The first time you lose sight of land or sail at night, even if it is only crossing the bay, loses

nothing in the retelling. They are passages that rank, in memory at least, with the greatest of circumnavigations. For me, passage making is going for a sail – *any* sail.

PASSAGE MAKING VERSUS PASSAGE PLANNING

Passage making is often regarded as synonymous with voyage or passage planning, but passage planning is only one part of the story. How you implement your passage plan is a very different, some would say more skilful, activity than planning. The word passage in the term *passage plan* also suggests that your plan only covers the period when you are at sea. In fact, the planning and the preparation for your passage may begin weeks, months or even years before you cast off.

In the words of that old military adage, 'Proper planning and preparation prevent pretty poor performance'. No soldier ever said 'pretty poor performance', but its meaning burns through: if you want a safe, seamanlike passage then think through what you want to achieve and do the hard work ahead of casting off. Another military cliché is 'Sweat saves blood'. Translated into sailor speak, this becomes 'Plan well, prepare thoroughly and sail easy'.

Passage making not only includes all the planning you do before you cast off and your efforts to execute that plan, but it also takes in how you equip and organise your boat, how competently the boat is sailed, the relationship between you and your crew and the general atmosphere on board. Above all else, sailing should be enjoyable for everyone involved and making it so lies heavily on the wise skipper's shoulders. A happy crew means a fair passage.

Even if you are making a passage so familiar you could do it in your sleep, you must still have a passage plan, firstly because you need it and secondly because the law says that you must have one.

SOLAS

Issued under the auspices of the International Maritime Organization (IMO), the International Convention for the Safety of Life at Sea, or SOLAS for short, is probably the most important of all international treaties on safety at sea. The first version was inspired by the sinking of the *Titanic* and came into force in 1914. Since then it has been updated several times. Normally SOLAS only applies to commercial vessels but Regulation 34 of Chapter 5 of the latest version, generally referred to as SOLAS V/34, is a rare exception, applying to leisure and commercial vessels alike.

Dealing with safe navigation and the avoidance of dangerous situations, it requires that 'prior to proceeding to sea, the master shall ensure that the intended voyage has been planned using the appropriate nautical charts and nautical publications for the area concerned, taking into account the guidelines and recommendations developed by the Organization.' Sadly, the SOLAS guidelines and recommendations on passage planning have been developed with commercial vessels in mind. Leisure sailors are left to first work out and then follow their own guidelines and recommendations.

To help, the Maritime and Coastguard Agency (MCA) has produced their own advice for leisure sailors. They recommend that, when planning a boating trip, skippers should take into account factors such as weather, tides, limitations of the vessel, the crew and any navigational dangers; prepare a contingency plan; and leave information about their passage with someone ashore. Remarkably, there is no requirement in the rules or the MCA's advice for the voyage plan to be written down and, most curiously of all, the rules apply only when sailing outside 'categorised waters'. Much of the UK's coastal waters are classed as 'categorised waters'.

MCA ADVICE FOR LEISURE CRAFT ON VOYAGE PLANNING

Regulation V/34 'Safe Navigation and avoidance of dangerous situations' is a new regulation. It concerns prior-planning for your boating trip, more commonly known as voyage or passage planning. Voyage planning is basically common sense. As a pleasure boat user, you should particularly take into account the following points when planning a boating trip:

WEATHER

Before you go boating, check the weather forecast and get regular updates if you are planning to be out for any length of time.

TIDES

Check the tidal predictions for your trip and ensure that they fit with what you are planning to do.

LIMITATIONS OF THE VESSEL

Consider whether your boat is up to the proposed trip and that you have sufficient safety equipment and stores with you.

CREW

Take into account the experience and physical ability of your crew. Crews suffering from cold, tiredness and seasickness won't be able to do their job properly and could even result in an overburdened skipper.

NAVIGATIONAL DANGERS

Make sure you are familiar with any navigational dangers you may encounter during your boating trip. This generally means checking an up to date chart and a current pilot book or almanac.

CONTINGENCY PLAN

Always have a contingency plan should anything go wrong. Before you go, consider bolt holes and places where you can take refuge should conditions deteriorate or if you suffer an incident or injury. Bear in mind that your GPS set is vulnerable and could fail at the most inconvenient time. It is sensible and good practice to make sure you are not over-reliant on your GPS set and that you can navigate yourself to safety without it should it fail you.

INFORMATION ASHORE

Make sure that someone ashore knows your plans and knows what to do should they become concerned for your well-being. The Coastguard Voluntary Safety Identification Scheme (commonly known as CG66) is free, and easy to join. The scheme aims to help the Coastguard to help you quickly should you get into trouble while boating. It could save your life.

To reinforce advice from the MCA there are hundreds of checklists available on the internet. Written by leisure sailors to lead you through the passage planning process, they all work the same way: tick the boxes, fill in the missing words and you have your passage plan. Checklists have their place. Many of those I have seen were written by those who have been there and done it all. Their checklists have grown out of their own hard-learned experiences in preparing their own boat for their own long, blue water voyages. Their lists have a sound

CATEGORISED WATERS

No vessel is required to have a passage plan when they are sailing in categorised waters. Categorised waters have statutory force under Regulation 2 of the Merchant Shipping (Categorisation of Waters) Regulations 1992 and were meant:

- for the operation of Class IV, V and VI Passenger Ships
- to determine which waters are not regarded as 'sea' for the purposes of regulations made, or treated as made, under Section 85 of the Merchant Shipping Act 1995

There are four classes of categorised water:

- 1 Category A: Narrow rivers and canals where the depth of water is generally less than 1.5m
- Category B: Wider rivers and canals where the depth of water is generally 1.5m or more and where the significant wave height could not be expected to exceed 0.6m at any time
- 3 Category C: Tidal rivers and estuaries and large, deep lakes and lochs where the significant wave height could not be expected to exceed 1.2m at any time
- 4 Category D: Tidal rivers and estuaries where the significant wave height could not be expected to exceed 2m at any time

Categories C and D include considerable chunks of the UK coastline, much of it very popular with leisure sailors. It would be imprudent to sail in these waters without preparing some sort of passage plan. Meeting short, steep, 1 metre high waves is always uncomfortable. Encountering the same waves when they have grown to 2m is serious, especially if the wind is against the tide.

I suspect that excluding categorised waters from SOLAS V/34 is more for the benefit of commercial vessels, and the implications of the conditions described in Categories C and D for leisure craft were overlooked.

It is worth noting that if you spill diesel then under the Merchant Shipping (Prevention of Oil Pollution) Regulations 1996, 'sea' includes any estuaries or arms of the sea.

empirical base and are frequently prefaced by advice like 'good preparations are essential for a successful voyage'. They contain much worthwhile information that the authors wish to share so that others don't have to reinvent the wheel. But be wary of assuming that one checklist fits all and that you must, for example, prepare for every passage as if you are about to cross an ocean. Nobody can deny that good preparations are crucial to a successful voyage, but they should be appropriate to you, your boat, your crew and your voyage, otherwise you could find yourself behaving inappropriately.

HAVE A GOAL AND KNOW THE FACTS

Confusing passage making with passage planning puts the cart far in front of the horse. Before you begin planning any passage, you need a clear vision of what you are attempting to achieve. In other words, knowing your goal comes first. Not just any goal – *your* goal; or, if you prefer, your aim. They both describe what you wish to achieve.

You cannot plan without information. Once you have an unambiguous goal then you can

GOING TO EXTREMES

We were rafted up alongside another boat on Whitby's Fish Quay. It was a pleasant, sunny, summer's day with a kindly north-westerly wind. Both boats were waiting for the tide to sail south. When the time to cast off arrived, the crew of the other boat appeared on deck dressed in oilskins, seaboots, lifejackets, gloves and harnesses, with fearsomelooking knives, round their waists and, although it was early morning, torches on lanyards round their necks. Only their eyes, sunglasses actually, were visible behind their zipped up hoods. They looked like a SWAT team on a dangerous mission.

As we sailed out of the harbour, the skipper of the other boat told us that they were sailing 16 miles south to Scarborough. He passed this information across in the same tone of voice Columbus used when telling his crew that they were bound for the New World. I felt a little sad. I am sure they enjoyed their sail to Scarborough but I could not help wondering if they had worked out what they were doing for themselves or if they were unquestioningly following some universal passage planning checklist which insisted that on a cloudless summer's day, in a friendly wind and easy sea, they must dress for rounding Cape Horn in a blizzard.

The unthinking ticking of boxes is not confined to clothing. Once clear of the channel when you leave Lymington it is under 3 miles to Yarmouth on the Isle of Wight – less than an hour's sailing. In summer months it is not unusual for a yacht on passage between Lymington and Yarmouth to contact Solent Coastguard and spend ten minutes putting in a transit report, carefully listing details of their yacht, number on board, destination and ETA. Ten minutes later they are back on air advising the coastguard of their arrival in Yarmouth. I am sure that they are only following their passage plan as detailed in their checklist.

Checklists are useful but they are a tool, an aide-memoire, not an instruction or commandment chipped in stone on a distant mountain top. They are not the result of a sudden revelation as you sail down channel towards Damascus. They should grow out of your passage making strategy, be written by you and be unique to your passage.

begin collecting all the relevant information. Only when you have that information can you begin planning how you can best go about achieving your aim: planning without information is to dream.

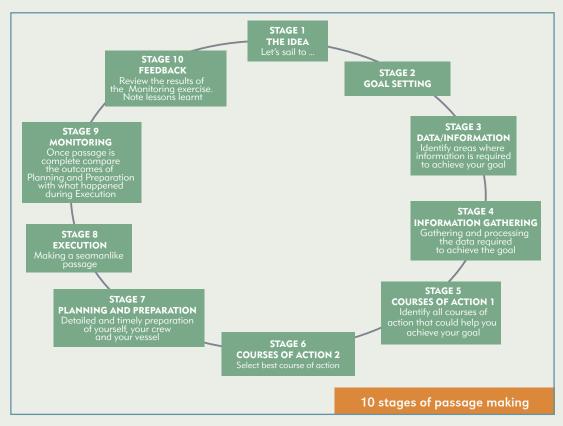
PLANNING IN STAGES

Everything is easier if it is broken down into small steps. Any strategy for passage making travels through a multi-stage process. Each stage has its own retinue of secondary phases. Going to sea is far down the line.

Passage making falls naturally into two major phases: onshore and at sea. It may seem odd to claim that you do passage making onshore but you do. It is when you do all the hard work.

ONSHORE

The onshore phase begins the instant the idea of the voyage or cruise first occurs to you, which may be some time before you cast off. This is when the bulk of the work happens and when the time available and resources are at their greatest. This is when you have the



best, and most direct, access to information, suppliers, engineers, electronic engineers, sail-makers, boatyards, riggers and other specialist help. It is when the assets that you can bring to resolving problems and difficulties are at their greatest. It is the time when you have the greatest control over events and the pace at which they happen. You can accept delays or speed the programme up, change the sequence in which work is carried out, or drop or add items to the programme.

It is extremely important to make sure that your work during the onshore phase is fully complete and done to the highest possible standard before you go to sea. Planning and preparation are never again going to be so easy. In his book *Cruises of the Joan*, W E Sinclair tells how in 1927 he planned to cross the Atlantic from Britain via Iceland in his boat *Joan*, a shade over 22 feet overall, in which he had already cruised round Britain and sailed to Madeira and back. As the season wore on, his preparations fell further and further behind schedule until he reached a point where if he didn't sail immediately he might not sail at all that season. It is a temptation to which we have all been exposed and Sinclair, as we all have done, yielded to temptation. He sailed, only to lose his boat south of Greenland. His experience is a salutary warning on the perils of cutting the onshore phase short.

Throughout the onshore phase, lack of cash and time may tempt you to make compromises. Some of these temptations may be trivial and carry no significant penalty. Even so, think carefully before yielding to the blandishments of shortcuts. The sad demise of Donald Crowhurst in the 1968/69 Golden Globe Race was partly due to an evil alliance of lack of cash and pressure of time dominating his preparations. This created problems and

difficulties that were unresolved when he sailed, remained unresolved at sea, and ultimately contributed to tragedy.

By comparison, Alec Rose set out on his circumnavigation in *Lively Lady* but returned to harbour after his boat suffered damage in a collision. Faced with further difficulties, he prudently delayed his attempt until the following year rather than set out too late in the season to safely round Cape Horn. Francis Chichester, meanwhile, left later but stole his thunder and sailed *Gipsy Moth IV* into the history books.

AT SEA

At sea, the process of passage making continues through its various phases unbroken, if not uninterrupted, until you have finally achieved your aim and safely berthed. Once you have cast off you are on your own. Fickle gods rule the weather and Poseidon imposes his will on the waves with a rod of iron. Modern communications open up the possibility of seeking advice or information from shoreside contacts, but the bottom line is that setbacks at sea must be resolved using onboard skills and resources. It is impossible to carry bespoke resources for every conceivable situation. All you can reasonably manage is to cover the more obvious and hope that imagination and a talent for make-do and mend provides answers for the rest.

If events don't go according to plan, life doesn't stop while you appraise the situation and work out what to do. It is a truism (not a bad joke) that the situation is fluid and you are always acting under pressure of time using incomplete, possibly inaccurate, information and working with inadequate resources. This is when the time spent shoreside thinking through your goal, gathering information and considering the thousand 'what-ifs' gives you the confidence to trust yourself and your decisions.

SUMMARY

Sailing ought to be fun, not an uncertain and uncomfortable journey from one terrifying incident to another with the crew split into feuding cliques. Having a successful and enjoyable passage is up to you, and this book gives you the tools to do it your way.

Passage making begins with a tailor-made plan for your voyage, your boat and your crew, and writing your own plan involves going back to the first principles of passage making. That is what this book is all about. The first part explains the principles that lie behind creating your own passage making plan. The second part looks at what needs to go into your plan.

To cover as much ground as possible, many of the points discussed in this book are treated as though you are about to make an ocean voyage. This leaves you to pick and choose the factors most relevant to your passage – clearly not every ingredient needs to be considered to the same depth or even be included in every plan. As a general rule, the longer the passage then the more detailed your planning should be.

Once all your planning and preparations are complete, the third section considers how best to put your plan into action and follows up with practical examples of how the principles of passage making can be applied to day, offshore and ocean passages.

The use of the word 'perfect' in this book's title is not an egotistical claim regarding the advice it contains. Any perfection in passage making comes from you, the effort you put into your planning and preparation, the skill with which you execute your plan and the passages that result. Hopefully, this book will help you make it perfect.

THE TEN SECRETS OF PERFECT PASSAGE PLANNING

1 CONSTANCY OF PURPOSE

Create a constancy of purpose by very carefully considering your goal and allocating resources to its long term aims rather than short term objectives.

2 OUT WITH THE OLD

Sailors have traditionally supported time-honoured values and methods. Many of the older generation regret the passing of the old ways. It was ever so. Sometime during the Stone Age, the introduction of sails was ridiculed by traditionalists who reckoned there was nothing wrong with paddling your own canoe. If you do not keep abreast with the latest developments then you will be left behind.

3 USE THE RIGHT EOUIPMENT

Identify the equipment you will use and need aboard your boat and buy, beg or borrow only the best. Second rate equipment often has a short half-life and fails when you need it most. It is a false economy. Buying toys for boys is a waste of money.

4 KEEP RAISING STANDARDS

Aim to constantly improve your passage making skills. Always look for newer and better ways to plan and execute your passages.

5 MAKE TRAINING A PRIORITY

Keeping abreast of new developments includes understanding how they work and taking advantage of them. If you and your crew are not constantly learning new skills then you are on the way to becoming old fogeys.

6 VALUE LEADERSHIP

Develop a style of leadership that helps your crew work better together.

7 BREAK DOWN BARRIERS

There should be no barriers between yourself and your crew. You are a team and you, your mate, watch officers, and crew, especially those with individual areas of responsibility such as the engineer, electrician, purser and bosun, must often come together to resolve a problem. Clinging to the traditional ship's hierarchy and insisting the skipper must always be seen to be in charge can hamper finding a solution. For example, if it is an engineering problem then step back and allow the engineer to take the lead.

8 STEER CLEAR OF EXHORTATIONS

Avoid using slogans, catchphrases and buzzwords to motivate your crew or bond them together. It does not, Jargon soon becomes meaningless and whatever little positive effect it may have is soon lost.

9 ENCOURAGE SELF-RESPECT

Give credit where it is due. When someone does a good job then publicly praise them. If <u>someone has a better</u> idea than you then publicly congratulate them. You feel good, they feel even better and everyone works harder knowing their work will be acknowledged.

10 ALWAYS DO BETTER THAN LAST TIME

Improved performance comes from having the correct equipment, training and practice. Doing better is everyone's job. Your job is to make sure they know this and this time to do better than last time.



PARTI THE THEORY



ACHIEVING YOUR GOAL

Obstacles are things a person sees when he takes his eyes off his goal.

E Joseph Cossman

A useful tool in passage making is to establish a hierarchy with your aim or goal at the top. Below this are a series of objectives, which – should they be successfully achieved – lead you to your goal. It is rare for objectives to follow one after another in an orderly queue, each waiting their turn. More usually it is a wild dance as they compete for your attention and resources. Under each objective is a series of strategies, which detail how you intend to attain that objective.

It is usual to claim that you can have only one goal; however, there are two complicating factors. Firstly, you may give the responsibility for carrying out some of your objectives to others and, even though they are aware of the bigger picture (ie your goal), what was one of your objectives becomes their goal. In a further twist, their strategies for achieving their goal (your objective) may be quite different from those you would have chosen. Secondly, goals are not always fixed. Your goal might be to sail from A to B but for all sorts of reasons you may decide to sail to C or D. In other words, you have a new goal.

DEFINING YOUR GOAL

Every passage starts with a light-bulb moment. The instant when the first glimmerings of an idea spark into life is usually preceded with the words 'Let's sail to...'. Many of these unexpected inspirations burn out, like shooting stars, as suddenly as they appeared, dismissed as too fanciful, too ambitious, too costly, too time-consuming, too ridiculous or simply the product of too much ale.

Sometimes one hardy idea, flickering and spluttering, hangs in there, scurrying around your head like a fractious child demanding attention. You give it a second and then a third thought. It has possibilities but you know only too well that in the real world any goal, however modest or ambitious, short- or long-term, comes laden with small print. Goals that do not know their limitations are a fantasy to see you through the boredom of earning a living.

IDENTIFYING THE LIMITATIONS

You must identify the limitations to your goal and work out how best to minimise their effect. Sadly, there is no standard checklist of limitations. Their type and number depend on the passage and person. A useful way to proceed is to write down your goal. This breathes life into your idea, and gives it the energy to spark your imagination. To reveal its limitations, your written goal must be concrete and specific. Bear in mind that every action has its reaction. Your preferred way of solving one limitation, besides tweaking your goal, will also affect how you deal with other limitations.

Identifying every limitation is impossible. No matter how carefully you work to identify the limitations to your goal, some always escape discovery until you are far out at sea.

A year or two ago I planned to sail up the east coast of England, through the Caledonian Canal to the west coast of Scotland. There I would play amongst the highlands and islands for a few weeks before dropping through the Crinan Canal into the Clyde estuary and taking the newly restored Forth and Clyde Canal back to the East Coast and home. A pleasant circular route and, since I had previously followed the Leeds to Liverpool Canal from coast to coast, complete my hat trick of traversing Britain's coast to coast waterways.

I knew that before entering the Forth and Clyde Canal I had to lower the mast and checked there were arrangements for this at Bowling where the canal began and also at the other end where I entered the Firth of Forth. I also noted that the locks on the Forth and Clyde take boats 60 feet long and 20 feet wide which was more than adequate for my yacht.

I was in the Clyde and approaching Bowling when I discovered that if I had read further I would have learned that the maximum air-draft of the Forth and Clyde Canal is nine feet. There is a fixed gantry on the stern of my boat. Even with the mast down I was snookered with nobody to blame but myself.

TIME

Most limitations are not self-inflicted. High on most people's list is time. Only a lucky few have sufficient spare time or cash to sail when they like for as long as they like. Fortunately, unlimited time or cash aren't essential for great cruises.

For most of us, our sailing is limited to a two or three week summer cruise, topped and tailed with a long bank holiday weekend sail. In between there is some weekend sailing and perhaps an occasional day or evening sail or a race round the bay. This means that if your boat is based on the south coast and you wish to spend your three week summer holiday exploring Scotland's west coast, then after sailing north you would be lucky to have a week left to discover the Highlands and Islands before beginning the voyage home. A week is barely time for a decent dram, and a day or two of bad weather would see you starting your return journey before you arrived.

There are always options to lessen any limitation - in this case, ways for you to extend your time on Scotland's west coast. Perhaps the most obvious way is to sail your boat north over the long Easter break. Leave it in some suitable harbour and return home by road or rail until it is time for your summer cruise. Once your cruise is complete, you can sail home over the August bank holiday.

This solution insists that you take your summer break between the Easter and August bank holidays. You might consider tagging the August bank holiday on to the end of your three week cruise. This would escape a second long journey north to pick up your boat for the return trip and, since you are simply extending your time at sea, also avoid the need for time-consuming pre-sail checks that would be necessary after a break.

The bank holiday passages are, in effect, delivery passages where you go to sea and keep going until you arrive, regardless of the weather. This is especially true of the Easter passage north, when the chances of meeting heavy weather are fairly high. If you normally sail only with your family, you may require a stronger, more numerous crew to guarantee the necessary manpower to remain at sea continuously. Even so, should the weather prove too much you might find yourself out of time, in a harbour short of your destination. It may not be the end, but it certainly means exploring a new range of alternatives.

Another option is to use three crews. One spends their summer cruise taking your boat north. You then have your three week cruise and finally, around the August bank holiday, another crew brings your boat back to your home port. Placing your boat in the hands of a crew you trust for the delivery passages means you must be confident they will look after her as carefully as you do. This probably rules out complete strangers, certainly as skippers; it also means juggling three sets of holiday dates and possibly discussions with your insurers.

Alternatively, you could spend one summer cruising slowly north and leave your boat in Scottish waters for several seasons while you explore at leisure before spending another summer sailing home. A drawback to this option is that although weekend sailing is just about possible while your boat is kept in Scottish waters, the day and evening sailing you would normally do from your home port is almost certainly out of the question.

Or, you might consider chartering a boat. This becomes the option of choice if your goal is to spend your three-week holiday cruising in the Caribbean, Mediterranean or other distant waters.

| AIM: to cruise the west coast of Scotland from home port on the south coast | | | | | | |
|-----------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Limitation | Nature | Options | Consequence | | | |
| Time | There are only three weeks available | Sail north as quickly as possible, cruise, and with a week in hand return south | The trip north is about 550 miles, say 5/6 days at sea. After allowing for the trip home this leaves only 8/9 days for exploring the West Coast Timetable is very tight. Two or three days poor weather could throw it completely out Is your normal crew capable of spending 5/6 days continuously at sea? If the answer is 'no' this is not the option for you unless you supplement your crew | | | |
| | | Extend the time available; have one crew deliver the boat north; you cruise for three weeks; have another crew bring the boat home | Must have absolute faith in delivery skippers and their crews to deliver the boat in a fit and seaworthy condition Must coordinate timings of your cruise with theirs Must insist they allow at least 14 days for their passage Sort out financial arrangements. Do you contribute towards the cost of their cruise or do they chip in to help pay for yours? Confirm arrangements with insurance company | | | |
| | | Extend the time available; spend one summer sailing north, the next cruising and the third returning home | Weekend sailing would be topped and tailed by long, tiring road/rail journeys Day sailing out of the question Winter refit could be awkward North/south cruises are splendid opportunities to explore the Irish and Welsh coasts | | | |
| | | Charter | For a short while you have the expense of running two boats You could charter a larger boat than needed and invite friends to share the costs | | | |

| Limitation | Nature | Options | Consequence |
|------------|--------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | You escape the hassle of the north/south delivery trips Weekend and day sailing on your own boat is available as normal outside your summer cruise |
| | | Choose to cruise somewhere within easy reach, say the Channel Islands or Brittany | Abandon goal. Throw six to start again |

THE BOAT

Another limitation to your goal is your boat, but this may not be as great as it might first appear. A belief has grown up that big is best. Twenty or thirty years ago the average yacht was probably around 25 feet overall and there were fleets of pocket cruisers well under 25 feet LOA. Most were excellent sea boats. Classes like Silhouette, Trident, Hurley, Eventide, Corribee and Signet built up enviable reputations and put up some very respectable passages, envied by sailors of bigger boats. Many of these small craft are still going strong today.

Of the five yachts that took part in the first singlehanded transatlantic race in 1960, four were 25 feet LOA or less. The exception was Francis Chichester's Gipsy Moth III, which at 40 feet LOA was by far the largest boat in the race. The smallest - Cap Horn, sailed by Jean Lacombe - was 6.5m (20.9 feet) LOA.

The first known double Atlantic small boat crossing was made in 1880/81 by Fredrick Norman and George P. Thomas in their 16 foot converted dory Little Western. In the 1970s Alan Toone made a very impressive double Atlantic crossing in a 21 foot Corribee, Corrie Bee.

In the 1950s to 1980s, boats 30-35 feet overall were thought fit for very serious passages. Alec Rose was only the seventh person to sail solo round Cape Horn. His boat, the Lively Lady, was 36 feet LOA. Of the nine yachts competing in the 1968 Golden Globe Race, four were under 35 feet LOA and the winner (and only finisher) was Robin Knox-Johnston's 32 foot LOA Suhaili. Joshua Slocum's Spray was 37 feet overall.

Nowadays, boats around 35 feet LOA are considered small. The average is about 40 feet LOA and a 50 foot yacht entering a marina barely raises a ripple of interest. Somehow, despite all the evidence, waterline length has become conflated not only with seaworthiness but also with seamanship. The truth that a small, well-equipped yacht is safer and more seaworthy than a much larger, ill-found yacht has been forgotten, along with the history of small boats pioneering ocean cruising.

If your goal is to make an ocean crossing, the size of your boat alone should not be the determining factor whether or not you use your current boat or trade up. If you decide to trade in your present boat for one you believe is more suitable, this will have a knock-on effect on your timescale and budget. There are few, if any, off the shelf, ready to go, oceangoing boats. There are many classes of boats with well earned reputations for making ocean

passages and your most likely solution is to buy one of these, new or second-hand, and fit it out for ocean passages. This will probably add at least a year to your timetable.

EOUIPMENT

The longer your passage, the more equipment you will need. The bigger your boat, the more its equipment costs, bringing your boat, equipment and cash into a vicious circle.

If you intend to sail across oceans then you must have some form of absolutely reliable selfsteering. My preference is for a windvane but I am not a snob. Electronic autohelms are fine. Compared to windvanes they are cheap, but they require a reliable source of constant power together with the means of generating and storing it. Windvane or autohelm, whatever your choice, you must have one or other or both for long passages.

I once sailed across the Pacific with four others on a yacht with no self-steering. Someone had to be holding the tiller all the time. Having crossed the Atlantic solo, working 9.00am to 5.00pm and only touching the tiller when entering or leaving harbour, I found helming for hours on end under a tropical sun in an unsheltered cockpit an unpleasant, unnecessary and, with some foresight, avoidable slog.

Other equipment you may wish to add for ocean passages includes satellite communications, watermakers, fridges, freezers, generators, solar panels, extra fuel and water tanks and so on. The only limits to this list are your wallet and imagination.

PERSONAL SKILLS

An easily overlooked limitation is whether or not you possess the skills and experience to make the passage safely. Before the introduction of electronic navigation an individual's practical competence in seamanship and navigation more or less kept step with their ambition. If a passage involved sailing out of sight of land, you delayed sailing over the horizon until you were confident that you had the skills to find land again, more or less where expected. Now, have plotter will sail. Plotters and GPS treat sailing across an ocean as navigationally no different or demanding as a trip round the bay and have given people the confidence to boldly sail wherever they want.

It is not uncommon to come across yachtsmen of very limited experience undertaking passages that, if they had to navigate on a paper chart, would be far beyond their reach. Not too long ago, competence in astronavigation was a requirement for any ocean passage. Now, if you went round the yachts in Las Palmas in mid November removing their plotters it would be surprising if the numbers leaving for the Caribbean reached double figures.

Always list what skills and experience are required to achieve your goal, cast an honest eye over yours, and ask whether they fit the bill. There is nothing wrong with being ambitious but is that gap between your ambitions and your abilities a challenge or a yawning chasm waiting to swallow you up? Are you exploring the boundaries of your skills or taking a step too far into the unknown? Can you find some means of bridging that gap?

Before setting out on my first solo Atlantic crossing I had never experienced long periods of solitude. Did I have what it takes to survive weeks of being alone? How would I cope, particularly when the going got tough and there was no one to consult or blame? The only way I could see of finding an answer was to sail and hope.

GOALS ARE BUT MANY SMALL LITTLES

There is a Latin proverb that says: 'Greatness is but many small littles.' Goals are no different. Anything and everything is possible when you dream but when you come face to face with your goal and have to make a start or back down they have a habit of looking bigger and more difficult than you thought. This illusion of size is bolstered by our addiction to hype. The right publicity can make a gentle day sail across the bay appear like an epic voyage into unknown, storm wracked, danger infested waters. Happily, just because a goal is apparently unattainable does not mean it is out of reach. You are simply looking at it the wrong way.

Before setting out on my first Atlantic crossing I spent months in planning and preparation. As the departure date approached I suffered from fits of chronic doubt and my carefully laid plans broke out into a horrible rash. My longest solo passage to date was about 150 miles. Sailing almost 3,000 miles was beyond my ken. At only 20 feet overall, my boat was small for this sort of passage. I knew, in theory, what was required but it is a big ocean. Worrying grew to fill my days and crossing the Atlantic looked increasingly impossible. Finally, my wife, fed up with my constant whining, said, 'Why don't you just go and see how far you can get?' She understood that I had developed a bad case of tunnel vision. I had come to see the crossing as a single, uninterrupted voyage. In fact it was, and still is, made up of a series of relatively short passages.

It is about 500 miles in easy hops between my home port and Falmouth, my departure point for crossing Biscay. I had, almost casually, made that trip the previous year when I had sailed round Britain. A few years before that I had crossed Biscay and cruised along the Iberian coast, albeit with a crew in a larger boat. It was not all unknown waters, and until I left the Canaries no passage was longer than 500-600 miles; but by then I would have the crossing of the dreaded Bay of Biscay under my keel. Even the 3,000 miles between the Canaries and the Caribbean could be taken in two bites by stopping off in the Cape Verde Islands.

For the first time I understood that the uncertainties that dominated my thoughts and loomed over me like a bouncer outside a nightclub were nothing more than a dinner suit on steroids. My goal of crossing the Atlantic remained but I now saw it as a Lego structure made up of a collection of shorter passages, which from a distance presented an imposing, unified construction. An Atlantic crossing is made up of a chain of secondary or minor goals that I could tackle one by one. Some of these shorter passages I had made before. Others I knew were within my experience and capabilities and the rest... well, that was the interesting bit.

As I wandered across the ocean, each day's objective would be my next port, whether it was 20, 200 or 2,000 miles away. I would continue sailing along this chain of mini-goals as long as it remained fun. If, or when, it ceased being enjoyable I would stop, catch my breath and work out whether I wished to continue or return home. In the event I had a great fifteen months making an Atlantic circuit and enjoyed it so much I had to do it again.

TELLING OTHERS

Time spent considering your goal, its limitations and how it breaks down into manageable chunks is never wasted. Once you have all this clearly in mind it is time to sit down and talk it through with your crew.

We all have a natural tendency to see our plan's virtues more clearly than its defects. What we really want is the best plan, not what appears best to us. If you believe in your goal and reckon that your ideas on how you intend to achieve it are sound, there is nothing to lose and