

ISSUE 45

EARLY 1994

ISSN 0959-2881

Knotting Matters

Newsletter of the



INTERNATIONAL
GUILD OF KNOT TYERS

The logo is a circular emblem. It features a central illustration of a reef knot (square knot). The words "INTERNATIONAL" and "GUILD OF KNOT TYERS" are arranged in a circular path around the central knot. The entire cover is framed by a wide border of a reef knot, and the background is filled with a repeating pattern of reef knots.

GUILD SUPPLIES

I.G.K.T. BOOK PRICE LIST 1994

ITEM	WEIGHT	PRICE
THE KNOT BOOK		
Geoffrey BUDWORTH	95 gms	£2.50
MUCH ADO ABOUT KNOTTING (The 1st 10 years)		
Geoffrey BUDWORTH	65 gms	£2.50
BREASTPLATE DESIGNS		
Brian FIELD	65 gms	£2.50
TURKSHEADS THE TRADITIONAL WAY		
Eric FRANKLIN	110 gms	£1.50
KNOTCRAFT		
Stuart GRAINGER	130 gms	£3.60
ROPEFOLK		
Stuart GRAINGER	30 gms	£1.30*
TURKSHEAD ALTERNATIVES		
Stuart GRAINGER	30 gms	£2.20
SOMETHING DIFFERENT Over 50 button knots		
John HALIFAX	100 gms	£3.95

Weights are stated as a guide in calculating POSTAGE

* Indicates 33.3% discount available on orders worth £30 or more at retail prices.

Subject to availability of stock.

SUPPLIES SECRETARY

3 Walnut Tree Meadow

Stonham Aspal

STOWMARKET

Suffolk IP14 6DF

Tel: 0449 - 711121

KNOTTING MATTERS

THE QUARTERLY NEWSLETTER of THE INTERNATIONAL GUILD OF KNOT TYERS ISSUE No. 45 EARLY 1994

PRESIDENT

Glad FINLEY

Hon. VICE PRESIDENT

Dr Vaughan JONES F.R.S.

PAST PRESIDENTS

Percy BLANDFORD - Geoffrey BUDWORTH - Eric FRANKLIN -

Jan VOS - Stuart GRAINGER

GUILD ANNUAL SUBSCRIPTION RATES:
(RENEWABLE 1st JANUARY). PAYABLE By:
CASH/CHEQUE/EUROCARD/ MASTERCARD or
VISA.

Juniors (Under 16 years old).....£ 4.00

Seniors.....£14.00

Families.....£19.00

Corporate.....ByArrangement

Taxpayers in the UK - We would prefer a
covenanted subscription.

Except as otherwise indicated, copyright in
Knotting Matters is reserved to the
International Guild of Knot Tyers © IGKT
1994. Copyright in members' articles published
in Knotting Matters is reserved to the authors
and permission to reprint should be sought from
the author and editor. All sources of quotations
printed in Knotting Matters are acknowledged.

SECRETARY

Nigel HARDING
3 Walnut Tree Meadow
Stonham Aspal
STOWMARKET
Suffolk
IP14 6DF

Tel: 0449 - 711121

EDITOR

Gordon PERRY MBE
171 London Road
HORNDEN
Hampshire
PO8 0HH

Tel: 0705 - 592808

The IGKT is a UK REGISTERED CHARITY #802153

THE SECRETARY'S BLOTTER

The last time I prepared this little article, it was November, and winter was just closing in around us. That seems such a long time ago, and so much water has passed under the bridge. Today, as I write this, the winter is just coming to and end, a host of golden daffodils are beckoning me in to the garden to cut the lawn; and last night I lost an hour sleep, due to that ancient pagan festival of "Putting The Clocks On"!!

What a winter we seem to have had here in the UK. After three years of relatively little rainfall, it started to rain in October, and is only just beginning to dry up. It is now lunch time and the temperature is up to 5 degrees, spring is here at last!!

The response to the Membership Handbook has been encouraging, however I must take this opportunity to apologise for the omissions, and the errors which have crept in. I could blame a computer malfunction, but....

As the membership is continually increasing, I shall be producing a supplement with the additional members names, together with a list of errata. Hopefully this will be ready in time to go out with the notice of the AGM.

In response to requests from many members, a subscription reminder was sent out with the Handbook, and this has been most successful, with cheques and credit card details dropping like confetti through the letter box. The intention is to follow up those members who are more than three months in arrears. The work involved is not inconsiderable, and the cost of postage,

particular overseas, is expensive, thus prompt payment is appreciated.

Getting away from mundane administrative matters, I do get lots of interesting letters, and it is a pity that it is not possible to print them all. However I will mention extracts from a few. Aubrey Tucker a new member from Cornwall, on opening KM43 at p20 the article by Peter Pascoe reminded him of a display made by a Peter Pascoe, which he had seen in St Austell, some 48 years ago. A brief telephone call reunited the two after nearly half a century.!!

Tom Long tells me that after four mini strokes, the medics decided his blood needed thinning - with a mixture of Turps, paint thinners, rum and water. (Not too much water I hope -NH). He is much better now and is hoping to visit Czechoslovakia shortly.

Gus Erickson, (Maine) will be going to the exhibition in Lancing by bus, and is wondering whether there are any other members who would like to make up a small party and join him. He mentions safety in numbers, and a lot of available time for knot tying.

Finally, a query from W E Smothers (Illinois), who is interested in Bell Lanyards, but finds those in "Harrison" are too big for his purposes. He wants to make them 6-12 inches (150-300mm) long. Has anyone got any suggestions, or information?

Some members tell me about their other interests, many of which are as fascinating as knot tying. Roger Carter in New

Zealand puts ships in bottles, whilst Albert RN (UK) puts knot boards inside light bulbs, and before you ask, no they don't still light up!! Susan Manning (Maine) is into paper boats - real ones that is, not the sort you float in the bath! Incidentally, she sent me a copy of "The Paper Boater", which has a subscription reminder depicting an executioner standing by a chopping block, with a huge axe in his hand.....

It is time that I started to draw to a close, as time is pressing. I did think that once my son had learnt to drive, I would have so much more time available, as I would no longer be required to perform the statutory parental taxi duties. I had overlooked the paternal maintenance requirements due on an ancient "mini". Last summer I amazed myself to find that I was still capable of an engine transplant, and since Christmas I have replaced the petrol gauge (which involves removing the petrol tank complete) and this week, new CV joints. I conclude that the designers of cars have always been sufficiently well paid not to have to repair or maintain their own cars, otherwise these minor jobs would be much more simple!!

Why am I telling you all this, well, if you have written to me recently, you will have either had a long wait for a reply, or you will have found grease marks on the letter!!

I look forward to seeing as many of you as possible at the AGM at "Knot-Ingham" in May, and if I don't stop now I shall have nothing to write in KM46, which will be along soon.

Nigel Harding

An Apology

I would like to apologise to new member, high wire walker Philippe Petit, of 36 Private Rd, Shokan, New York. Not only have I included him in the Membership Handbook under the wrong name, but I have give his fax number instead of his telephone number, which is (914) 657 6814

My sincere apologies to Philippe, who would be pleased to hear from other members now that they have his number.

Knotting Matters

Copies of all past editions of Knotting Matters are available from the Supplies Secretary, price £2.00 plus post and packing.

Contact the Suplies Sec for an estimate, based on copies required. As a rough guide:

UK.....30p per copy

Europe.....50p per copy

The rest of the World..£1.00 per copy

MONKEY See!

By **Mike STORCH**...U.S.A.

The story is told of an island inhabited by monkeys. Someone inadvertently teaches one of the monkeys to wash food first before eating it. In time a second monkey, watching the first, catches on and begins washing food before eating it as well. Then a third monkey, a fourth and so on, until after a good deal of time there are one hundred monkeys washing food prior to eating. Then a curious thing happened; as if by design, the next morning every monkey on the island was doing it. Something happened. Perhaps a critical mass was reached allowing every monkey after the hundredth one to learn quicker and easier. It is with the first hundred monkeys, the ones that muddled through, with them I sympathize.

So it is with knot tying; with me anyway. A new knot comes along and I try it. Then again and possibly some dozens of times before I feel sure about it. Eventually it comes easy, as if the knot were there all along. I learn slow, but I learn good.

Turks heads were difficult for me in the beginning. The simple ones I found confusing; the complicated ones fascinating but impossible. Eventually I caught on. They make sense to me now. And just when I reckoned I'd put it all together, I discovered the braided family of turks heads. Bruce Grants "Encyclopedia of Rawhide and Leather Braiding" has a chapter on them. Once again, I'm muddling through.

The nautical fashion of putting more substance into turks heads without raising their dimensions (i.e. no more bights or parts) is to follow the lead. This results in a two or more ply knot. The braided turks head is quite different. Independent Turks heads are superimposed upon each other. The turks heads in this case may or may not have the same number of bights or parts. The turks heads don't even have to be of the same colour; and in fact if done in contrasting colours something artistic results. More importantly, the bights of the braided Turks head do not follow a common path as they do when following the lead. The bights in braided turks heads are staggered in parallel rows so that only the bights of one turks head reach the perimeter of the completed knot. This allows the ends to close tighter while adding materially to the body of the knot. This is all very difficult in the telling, and admittedly in the doing, at least initially. By working out any of this series of knots, a family resemblance can be seen enabling others to be worked out. My own first attempt was the "Pineapple" knot, a 6 bight seven part turks head as a foundation knot with a 6 bight five part turks head braided onto it. I struggled with it much longer than I'd care to admit, but eventually got good results.

Grant suggests the same braid works for turks heads of other dimensions, i.e. more bights or parts, the rule being that the turks

heads have an equal number of bights but a different number of parts. He gives no directions for the other size turks heads, only encouragement. But like I said, the family resemblance is there. On my first try I succeeded in braiding an 8 bight seven part turks head onto an 8 bight nine part turks head.

The "Star" knot is another of the family of braided turks heads. It is unique and worth mention. The foundation knot for it is a 5 bight six part turks head, while the superimposed knot is a 5 bight four part turks head. What makes it unique is the way in which the bights present themselves at the surface. At one end of the completed knot the bights are akin to those of the pineapple knot, while at the other end the bights appear at the surface giving the appearance of a five pointed star; hence the name. A neat trick indeed.

Other knots in this family have more subtle characteristics. What I can do is suggest some things that have worked for me and may make it easier for anyone else attempting them. Odd as it may seem, working with two colours helps. Doing each turks head of a contrasting colour, (i.e. foundation knot and superimposed knot) while helping to visualize things, also underscores the points of tucking. The other thing that will help, will be of help only after the knot is completed. This is not as contradictory as it sounds as it also helps in the visualization while adding perspective. The method is to untie a completed knot first forward, then in reverse. By this I mean undo the knot from its start to its center-point, leaving only the superimposed turks head intact; then undo

a knot from its finish to its centre-point, leaving only the foundation knot intact. A study in anatomy.

This probably all sounds quite complicated, unnecessarily so; like something best left to the mathematicians among us. It isn't, really. It's a diverse and interesting family of knots that demands something from the tyer, yet delivers much in return. And if you're anything like me, you'll also gain a deep appreciation for those first hundred monkeys.

Knot tying in the American West.....

P.S. Has anyone in the Guild done a long braided turks head? Specifically a 6 bight thirteen part? or even larger?

It seems the family resemblances break down at this level. If you can help, write me. Thanks.....

WEST COUNTRY KNOTTERS.

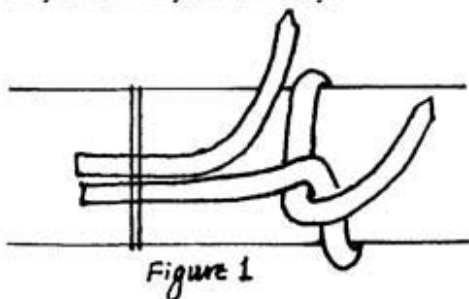
The branch held their annual meeting at Portishead (Home of the most revered commercial HF Radio Station in the world! - Ed) on 22nd January, there a small committee was 'persuaded' into office: Roger STARR (Chairman), Les BAKER (Sec/Treasurer), and Richard HOPKINS. Their meeting dates programmed for the rest of the year are 2 July, 12 November and the AGM on 28 January 1995. Any member wishing to contact Les, his address is 30a Morecroft Drive, Longwell Green, Bristol BS15 7DP - Tel 0272 327307

RINGBOLT HITCHING TIGHT & FAST

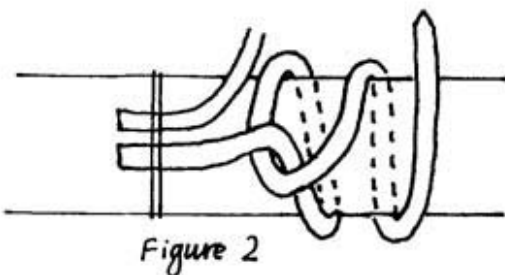
By John SMITH

Choosing which type of Ringbolt Hitching to use depends on a number of factors. When the primary requirements are that it should be very tight and preferably quick to build up, this method will fit the bill.

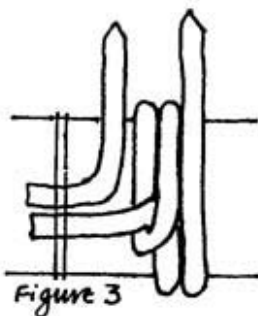
The Start: Use two strands and fix them on your bar in your own way.



The illustration shows a constrictor knot being used. (The difficult to draw bits are round the back. What I really used was sticky tape.) Start with a half hitch, using the lower strand. (Fig.1). Turn the cord back on itself and wind it right round the bar (Fig.2)

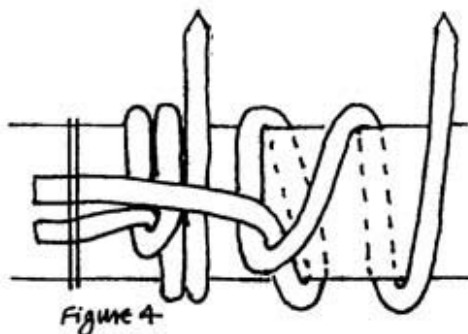


Draw it up snug so that it looks like Fig.3.



At this stage, you cannot pull it very tight or the strand is likely to pull out of the seizing. Save your strength for later.

The Continuation: Now use the upper strand. Draw it across the first half hitch so as to hold it down. Then carry out the same action as before. (Fig.4).



The process now continues, using each strand alternately. The pattern starts to emerge (Fig.5).

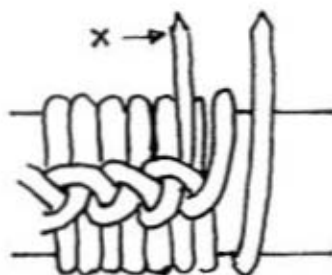


Figure 5

One of the primary requirements is obviously met. The Hitching builds quickly, thanks to the extra turn put on after each half hitch. When a few cycles have been completed, you can start to use some force without fear of pulling

everything apart.

The Technique: Before passing the strand marked "x" in Fig.5, pull tight at right angles to the bar, just as it emerges. Pull really tight. Haul on it. Hear it creak. The rib will be pulled slightly out of line of course, in the direction of the pull. Don't worry. The next part of the cycle is to pass that strand over the previous half hitch as in Fig.4. Use enough energy to straighten the rib, and hold it in place with your thumb.

The Result: The method produces a covering that can be put on very tight indeed. The rib is quite small and neat. The whole thing builds very quickly. Hiding the start and finish can be accomplished with whatever technique you would use for any other form of Ringbolt Hitching.

F	Q	C	A	T	S	P	A	W	I	R	S	L	T	C
D	E	H	O	K	R	L	M	L	A	N	Y	A	R	D
N	Q	E	Y	W	N	O	A	O	L	D	S	Y	S	M
E	U	E	A	L	P	O	T	H	G	E	U	L	T	A
G	E	L	E	T	C	B	T	H	R	E	A	D	A	K
N	R	O	E	S	H	E	E	T	B	E	N	D	N	E
I	T	U	N	T	S	N	R	F	I	D	S	R	D	F
K	A	I	I	C	K	D	S	M	A	N	N	S	I	A
R	S	P	L	I	C	E	T	Q	D	O	G	C	N	S
O	U	W	W	O	R	T	A	Y	U	H	A	A	G	T
W	S	C	O	R	D	N	P	A	D	A	C	B	P	H
O	S	T	B	P	O	O	L	L	R	L	R	L	A	R
E	U	Y	R	E	E	F	E	E	W	O	E	R	O	
D	K	D	N	O	S	E	B	B	I	G	H	T	P	
I	S	T	R	I	P	S	T	R	E	N	G	T	H	E

In this word puzzle - created for Knotting Matters by **Jamie MITCHELL** - there are 28 words to be found, all related to knotting and/or the IGKT. Backwards, up, down, forwards, or diagonally? Good Luck (Solution will be in KM46)



JEFF WYATT with the Devonport NAVY DAY'S Display



'Hands-on' Knot Board - Devonport NAVY DAY'S Display

A SURVEY OF TIER HANDEDNESS AND HABIT

SOME PRELIMINARY DATA

© Robert Chisnall, January 1994

INTRODUCTION

I read with interest Des Pawson's piece, "Left Hand - Right Hand?", in *Knotting Matters* (#41, Late 1992, Page 14); and I felt a bit guilty about not sharing my own findings on the same subject. Here is a quick review of some of my research. Having observed thousands of individuals tie knots in a variety of situations, I learned that the majority have very simple, unsophisticated tying habits. Practically everyone uses garden-variety Overhand Knots and Half Hitches almost exclusively. Is there any relationship between tier handedness and these basic tying habits?

TERMINOLOGY

The two types of Overhand Knots and Half Hitches are mirror images. One version twists, wraps or spirals to the left, the other to the right. (See Figure A.) Overhands and Half Hitches are the basic building blocks of many other knots. Therefore, any formations comprising Half Hitches and Overhand Knots have mirror images -- like Reef Knots and Grannies. As described by Geoffrey Budworth (1985) and Dale Nute (1986), the norm has been to call Overhand Knots that twist to the right, Right-Handed Overhand Knots, and those that twist to the left, Left-Handed Overhand Knots. I utilize the letters "S" (for left-handed) and "Z" (for

right-handed) as labels (Figure A.). This labelling system has several advantages. The letters "S" and "Z" are compact symbols that can be written and typed quickly. Also, the letters offer a visual cue to the direction of twist, and these designations adhere to an international textile standard. Most important, there is no left-handed or right-handed bias that might be associated with tier handedness.

I refer to Granny Knots as S/S and Z/Z configurations and Reef Knots as S/Z and Z/S. Granny Knots comprise two identical Half Hitches, Reefs require two opposite hitches. The letter in front of the slash refers to the first hitch tied. The letter that appears after the slash denotes the Half Hitch closest to the wends or working ends. I will call knot tiers left-handers (LH) or right-handers (RH), and dextrals or sinistrals.

THE SURVEY

From 1988 until 1990, I conducted a five-phase pilot study of handedness and tying habits. I surveyed just over 400 people, asking them to provide some information and perform a few tasks. This is the information that was requested: (a) the respondent's age and sex; (b) the respondent's handedness; (c) and the respondent's knotting experience (specifically, his or her knowledge of the

Reef Knot). The respondents were then asked to perform the following tasks: (a) tie several simple knots using both ends of one cord; (b) tie several simple knots using only one end of one cord; (c) tie a cord around a parcel using one piece of cord; (d) and tie shoelaces.

Each participant produced about a dozen knots that were later analyzed. (The minimum number of knots tied by one subject was zero, and the maximum was 15 by another. Some participants did not complete all tasks and/or answer all survey questions, so group totals vary in the tabulations that follow.) I analyzed

approximately 4,000 individual knots or knot groups.

All respondents were volunteers. They included high school and university students, student teachers, police officers, rock climbers and outdoor enthusiasts. There were more males than females. Most subjects were in their twenties; the youngest was four years old and the oldest almost 80.

A BRIEF SUMMARY OF MOST OF THE DATA

The data are summarized in Tables A and B. I have more information to add, and the analysis is ongoing.

Table A.

Hitch Twist and Tier Handedness: 1 and 2 Wend Tyings Combined

N (total) = 348	N (LH) = 44		N (RH) = 304	
	Sinistrals (LH)		Dextrals (RH)	
	N	P	N	P
More Frequently Tied	19	.43	156	.51
	Z for sinistrals		S for dextrals	
Less Frequently Tied	10	.23	36	.12
	S for sinistrals		Z for dextrals	
Mixed S & Z Tying	15	.34	112	.37

Legend: N = Number of respondents P = Proportion of dextrals or sinistrals responding

Table B.**Parcel and Shoelace Tying Habits and Tier Handedness: Rankings Compared**
According to Mirror Image Patterns

N (total) = 322

N (LH) = 37

N (RH) = 285

Sinistrals (LH)					Dextrals (RH)				
Parcel	Shoes	N	P	R	Parcel	Shoes	N	P	R
Z/Z	Z/Z	11	.27	1	S/S	S/S	87	.28	1
Z/Z	Z/S	6	.16	2	S/S	S/Z	39	.14	2
S/S	S/S	5	.14	3	Z/Z	Z/Z	26	.09	3
Z/S	Z/S	3	.08	4	S/Z	S/Z	22	.08	4
S/Z	S/Z	1	.03	6	Z/S	Z/S	19	.07	5
S/Z	Z/Z	0	.00	7	Z/S	S/S	15	.05	6
S/Z	S/S	0	.00	7	Z/S	Z/Z	15	.05	6
Z/Z	S/Z	0	.00	7	S/S	Z/S	12	.04	7
Z/S	Z/Z	2	.05	5	S/Z	S/S	10	.035	8
S/S	S/Z	3	.08	4	Z/Z	Z/S	9	.03	9
S/Z	Z/S	0	.00	7	Z/S	S/Z	8	.03	10
S/S	Z/S	0	.00	7	Z/Z	S/Z	8	.03	10
Z/S	S/S	1	.03	6	S/Z	Z/Z	6	.02	11
Z/S	S/Z	2	.05	5	S/Z	Z/S	5	.02	12
Z/Z	S/S	3	.08	4	S/S	Z/Z	3	.01	13
S/S	Z/Z	0	.00	7	Z/Z	S/S	1	.004	14

Legend: N = Number of respondents P = Proportion of dextrals or sinistrals responding
R = Rank from most to least abundant

A BRIEF DISCUSSION OF THE DATA AND SOME CONCLUSIONS

My observations and analysis during this initial study have confirmed one very important fact. Individuals tend to tie in certain ways out of habit -- whether these habits are learned or innate -- and tying habits are hard to override. These habits stay with the

tier for life unless extenuating circumstances are encountered. For example, it is difficult or even impossible for many tiers who prefer the S-twisting Half Hitch to produce a Z Half Hitch. It is also clear that several factors may cause hitch reversal or a switch in tying habit. These 'hitch-reversal factors' will be discussed throughout.

Table A summarizes the total numbers of left-handed and right-handed respondents who preferred S Overhands and Half Hitches, Z Hitches, or a mixture. (For example, 156 dextral or right-handed respondents mainly tied S Half Hitches and Overhand Knots, while 15 sinistral or left-handed subjects tied a mixture of S and Z Half Hitches or Overhand Knots.) The results for all knots -- one-wend and two-wend tyings -- were combined. Qualitative anomalies like Figure Eight Slip Loops could not be included.

The dominance of S Half Hitches among right-handers and Z hitches among sinistrals is indicated. However, the significance of this correlation is low because all tasks have been combined and the influence of hitch-reversal factors has not been taken into account.

Table B compares right-handers to left-handers according to how they tie parcelling knots and shoelaces. (For example, 87 dextral respondents tied both an S/S Parcelling Granny and an S/S Granny bow knot for shoelaces.) Sixteen basic tying patterns are listed. These tying patterns take into account all of the possibilities when tying two knots: a Reef or Granny parcelling knot, and a Reef or Granny bow knot for shoelaces. Qualitative anomalies were not included. Once more, it seems there is a tendency for right-handers

to tie S Hitches while left-handers prefer Z Hitches.

The number of working ends is a potential hitch-reversal factor. Some tiers naturally tend to tie S hitches with one wend but Z hitches with two wends; and they find it difficult if not impossible to reverse this habit (i.e., Z hitches with one wend and S with two).

The tying of loops is another factor. I discovered that certain subjects who strongly prefer the S hitch (using one or two wends) naturally tie Z hitches when making slip loops or bows in shoelaces. So, although there is probably a natural tendency in tiers to create primarily S or Z hitches, which could be attributable to the mechanics of the task and tier handedness, knot tying experience and situational factors can influence a tier's fundamental habit.

FUTURE RESEARCH

This is just a sample of the findings and ideas generated by the initial survey. Subsequent inquiry will examine brain laterality, learning, course and fine motor control, ballistic and corrective motor tasks, situational-specific interference as a hitch-reversal factor, material-specific interference as a hitch-reversal factor, sex differences, and possible links to the Blau torque test (Beaton, 1985).

LIMITATIONS OF THIS STUDY

1. This survey is based on a sample that is not very random. In order to make meaningful generalizations that are applicable to the greater population, respondents have to be selected purely at random. Considering time and budget constraints, and the ethics of enlisting

voluntary participants, this ideal cannot be approached easily.

2. Approximately 1 out of 14 people is left-handed. That makes it difficult to get enough data pertaining to left-handers in any research.

3. Many of the respondents in this study were knowledgeable, experienced knotters. Undoubtedly, this experience has obscured some of the latent habits left-handers and right-handers might have displayed as children. (Learning can be regarded as a hitch-reversal factor.)

I should mention one more thing.

Handedness is not necessarily a binary phenomenon. Some people are ambidextrous when it comes to handwriting; and, if you examine a variety of ballistic, corrective, fine-motor and coarse-motor activities (like throwing a ball and combing hair), you will find that handedness is not discrete.

A REQUEST FOR ASSISTANCE

While preparing this summary for *Knotting Matters*, it occurred to me that the Guild could help considerably in the continuation of this study. I would like to ask the following of Guild members. If you are interested in assisting by collecting more data, please write to the address at the end of this article. The procedure is: 1. Contact me at the address to follow. 2. I will send you surveys, instructions and materials. 3. Administer the surveys to any number of volunteers. 4. Record which knots were tied on each subject's surveys (this is a big job), or return the knot samples with the completed surveys and I will encode the data. 5. I will confirm the receipt of your data and forward a summary.

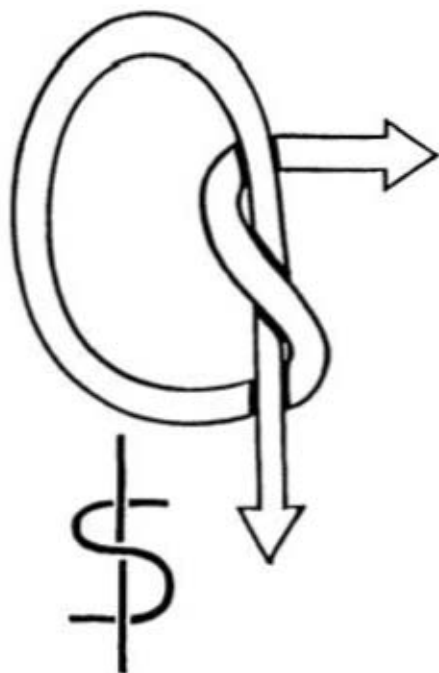
For those willing to collect data, the extent of your task will depend on how many subjects you survey and whether or not you decide to code the data yourself. I will take care of any mailing and material costs. With regard to steps 2 and 3, I still have to work out some protocols to ensure reliability, validity and consistency. Also, the data coding system and survey packages need to be modified for distribution. So, depending on the response I receive, survey materials should be ready to mail soon after this issue of *Knotting Matters* appears.

For those who would like to help, please write: ROBERT CHISNALL 505 LANSDOWNE AVE. NORTH BAY ON P1B 6Y7 CANADA Phone/Fax: (705) 494-9154

Drop a line if you just want to comment on this study.

REFERENCES

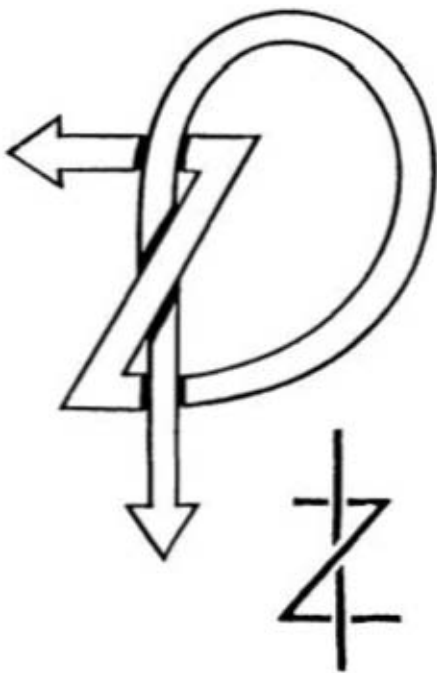
- Beaton, Alan.** (1985). *Left Side, Right Side*. New Haven: Yale University Press.
- Budworth, G.** (1985). *Knots and Crime*. Great Britain: Police Review Publishing Co. Ltd.
- Chisnall, R.** (1989). *An Investigation of Handedness and Knot Tying Habits: Implications for Experiential Education and Forensic Science*. A monograph available from the Education Library at the Faculty of Education, Queen's University, Kingston, Ontario, Canada.
- Chisnall, R.** (1990). Forensic knotcraft. *Royal Canadian Mounted Police Gazette*, 52(5), 4-8.
- Nute, H. D.** (1986). Mirror Images in Knots. *Journal of Forensic Sciences*, 31(1), 272-279.



S-TWISTING OVERHAND KNOT

LEFT-HANDED TWIST (LH, L)

SINISTRAL (S)



Z-TWISTING OVERHAND KNOT

RIGHT-HANDED TWIST (RH, R)

DEXTRAL (D)

S-Z DESIGNATION FOR OVERHAND KNOTS AND HALF HITCHES
 BASED ON THE CANADIAN GENERAL STANDARDS BOARD
 INTERNATIONAL STANDARD ISO 2 - 1973 (E), NO. 8.3-M89



Hon Sec At Work

Just in case you ave ever wondered, here s a picture of the Hon Sec working hard for the IGKT, or is he just waffling on the telephone again !?!

CAN ANYONE HELP?

Ben GILBERT writes....

I am an active rock climber and have recently become involved in Industrial Rope Access; which really means placing engineers and others in difficult, and sometimes dangerous, positions where conventional access is denied. Ropes and knots are a fundament of the job. We use nylon or Kevlar (etc) ropes and I would like to pick your brain on an issue. How does one tie two nylon ropes (with outer sheath) together if they are of two different thickness', ie 9mm and 13mm? The knot must be non-slip and be able to withstand force like wind bashing it against a structure, and hopefully it can be untied. In some situations we tie two different thickness' together and nobody seems to know the safest way except using two 'Figure of Eight' loops joined with a karabiner (usually two with locking gates). We always try and avoid 'Blood knots' (inward coil) as a fall on this renders the knot too tight to undo. We are all (at work) fairly ignorant in knot tying and use: Figure of Eight, Double Fisherman's, Clove Hitch, Alpine Butterfly, Fisherman's Bend, Blood Knot (for permanently tying of two ends) and thats it! We never have mishaps with our knots as they are tried and tested before active engagement.

oooOOOooo

Pauline CONSTANTINE writes.....

I am a fairly new member very interested in macrame but am finding great difficulty in finding books and patterns. So if anyone out there can provide me with any

help at all, such as addresses of stockists, publishers, photocopies, old books no longer wanted etc I would be very grateful. I particularly like wall-hangings and will pay for all contributions.

I would also like to say a big thank you to my local Plymouth group who have made me very welcome and given me help and encouragement. The phrase "get knotted" no longer upsets me!!

Pauline's address is: North Lodge, Beacon Hill, Newton Ferrers, PLYMOUTH, Devon PL8 1DB

Geoffrey BUDWORTH writes.....

New hemp rope was impregnated with hot tar (Richard Hopkins, KM44) in both Europe and America. Coal tar was thought to burn the fibres, weakening them by up to 20%. So a light gummy oil from pine trees, known as Stockholm tar, was preferred by some ropemakers. Later tests proved them wrong. The naval dockyard at Woolwich, on London's river Thames, suffered more than one fire in its tar house. The ropery buildings were mainly wooden and tinder-dry from the heat of the boiling tar kettles. A fire in 1759 badly damaged them. Another in 1813 entirely consumed the white (untarred) hemp shed, which burned alarmingly from 7 a.m. to 10 p.m. As it also threatened the Royal Arsenal, drums were beaten to call out the military; and one thousand artillerymen fought the flames.

THEORY v PRACTICE

By **Brian A GLENNON** ... U.S.A.

Does knot theory have anything to do with knot tying? I did not know of the existence of knot theory until I recently joined the I.G.K.T. Naturally, I eagerly sought out everything I could on the subject to add to my understanding of knot tying.

At first I thought knot theory was a collection of handy knot tying insights such as Ashley's "Law of the Common Divisor" (p.233), or Stuart Grainger's formula for determining the line length to tie a turks head (Creative Ropecraft p45). What I found has more to do with maths theory than it has to do with knots.

One book I read on this topic (Introduction to Knot Theory, 1963), summed up my first impressions exactly, "mathematics never proves anything about anything except mathematics", and as every rigger has learned through experience "a piece of rope is a physical object and not a mathematical one".

Normally I would dismiss knot theory for what it is, a branch of mathematics dealing with topology, but since joining the Guild I have met members with limited knot tying experience yet with the temerity to designate what constitutes a knot, based on knot theory, definitions coupled with a limited or no experience of mathematics. In this petty game of one-up-manship to appear sage, neophyte knot tyers are interchanging theoretical mathematical concepts for hard learned, pragmatic knot tying and rigging constructs with potentially dangerous results. Standing

rigging does not extend into infinity; rope has a beginning and an end; an over hand knot can be tied or untied; rope is a three dimensional object not a two dimensional one; rope cannot pass through itself and if made to do so you have to buy a new rope; and all knots can be tied or untied, regardless what theory states.

I never cared for mathematics, which is why I didn't major in it while at college, but I like knot tying, which is why I do it for a living. Yet I managed to have gleaned a basic understanding of some mathematical concepts from the calculus, linear algebra and statistic courses I took while in school to distinguish the difference between knot theory and knot tying. It is my opinion that the I.G.K.T should instruct members in the not so subtle difference between the two subjects.

OBITUARY

I'm sorry to say but **Stefan BACKSTROM** died late last year. I was at his burial. He was a retired captain and he did a lot of work for the local museum at Vaddo. Among many things, he and I made a knotting wall. He was working hard so the loss is great for the museum.

Sven Erik ANDERSSON

LOBSTERMEN of BOSTON

By Brian A GLENNON...U.S.A.

The three knots used by the fishermen in the lobster Co-op in Boston Harbor, Massachusetts U.S.A., where I worked as a sternman for two years, are the: fisherman's knot (called the water knot by Ashley #1414); the clove hitch; and the figure eight knot.

The side of Boston Harbour where I fished out of is South Boston; on the opposite side of the harbor, a mere half mile away, adjacent to Logan Airport, is East Boston. East Boston has a large group of lobster fishermen (lobstermen) similar to the twentyseven lobster boats comprising the Co-op in South Boston.

Both groups of lobstermen use a type of rope called 'potwarp'; both groups use the clove hitch to secure a rope, called a 'bridle', to their lobster traps; and both groups use a figure eight knot in the bridle to secure the trap to the main line (the potwarp). But this is where the similarity ends.

The lobstermen from South Boston (Southie) use the Fisherman's Knot to secure their cut or damaged lines together. Yet the lobstermen from East Boston (Eastie) use the Ring Knot (Ashley's #1412) to tie their lines together.

The criteria for a good lobsterman's knot are:

1. Easy to tie.
2. Functional.
3. Must pass through the hauler..

Potwarp is always cut because the knots

would be impossible to untie in an acceptable amount of time after they have been under strain and submerged for a week. So the normal practice is to cut away the knot and quickly re-tie it into the potwarp (and believe me, you cannot tie a fisherman's knot fast enough when things go wrong!)

Obviously the ring knot meets all the above criteria or else the lobster fishermen from East Boston would have nothing to do with it. Fishermen are a pragmatic bunch the world over.

Yet how is it that two groups of fishermen in the same city, working similar trades in the same harbor, separated by a short distance, use dissimilar knots for exactly the same purpose? The answer can only be inferred.

First, demographically the majority of the population of East Boston, including the lobster fishermen, are of Mediterranean descent (mostly Italian speaking immigrants); while the majority of the South Boston fishermen are of Northern European descent (mostly English speaking immigrants). Secondly, lobster fishermen are renown in the U.S fishing industry for their isolationism (to the point of xenophobia). The lobster boat next to mine was owned by the Vice-president of the Massachusetts Lobstermen's Association (M.L.A.) who has been lobstering for over thirty-five years. His father taught him how to tie the fisherman's knot, which he has been using all along and has taught his own son. Neither he or his son know how

RECORDING YOUR IDEAS FOR POSTERITY

John HALIFAX writes...

to splice or how to tie a bowline, and showed no interest in learning. Yet both could recognize the 'Eastie Knot' (ring-knot) when tangled around their own traps, but had no idea on how to tie it. To them, the ring knot was an indicator that a competitor was in the area.

When you consider that within their own lobster Co-op, family members had lawsuits against each other, then the lobster fishermen from a different Co-op were considered serious rivals and no information exchange ever took place. Both the fisherman's knot and the ring knot were brought over from Europe to the U.S. fishing industry by various immigrant groups and utilized in isolation from generation to generation without a mutual exchange of their use.

To this day, lobster fishermen in Boston Harbor USA work in isolation from each other and simply view the presence of an unknown knot as an indicator of the existence of a rival fisherman. The rumor is that the 'Eastie knot' is what the fishermen of the Mediterranean use to secure their damaged or cut lines together.

By Ed.... This takes me back to my early teens going out with the Lobstermen of Margate to lift and lay the pots off North Foreland; or sometimes just watching the pot marker buoys from the cliff-top to help catch poachers. I cannot remember the knots the men used on the gear but I must have tied a few hundred clove hitches around lobster claws (to stop them damaging each other, fighting in the well).

For those of you who might fly in or out of Boston I can recommend the fresh lobsters on sale at the airport.

After years of agonising about not being very good at drawing knots and being frustrated at being unable to record my newly discovered knots, I now use the following method of PHOTOCOPYING. Spot glue a piece of white A4 typing grade paper onto a piece of plywood or board the same size. Form the knot to be illustrated using LIGHT to MEDIUM BLUE coloured (braided 2 or 3 mm is best) cord, then attach it to the board with small (4mm) brass marine model pins, the type with small heads. Avoid using shiny or clear hard glues as they tend to leave a black mark on the photocopy. Set the 'Contrast' setting to MINIMUM, place the board face down in the copier and close the lid - now cover the copier with a thick dense material cloth to blank out any light that would otherwise filter in from the sides - Press the button and you will be delighted with the results - *(you can even enlarge or reduce to suit your editors needs)* - Hoohray - no more drawing!



John's ENDEAVOUR KNOT

AN EXTRA TUCK for a SHEET BEND

By Harry ASHER

Illustrated by Stuart GRAINGER

Left-Handed and Right-Handed Turns.

Fig. 1a shows a true Sheet Bend made up of a U-shaped part or hook, and a single turn. The hook cannot be said to be either left- or right-handed. Admittedly it can be drawn or made so that a point moving along it towards the short end must turn either to the left or to the right; but suppose it is made out of metal, like a staple with one long and one short end, then all such staples in a bagful will be indistinguishable from each other, though some may be facing one way, and some another.

The other half of the knot consists of a single turn. The single *clockwise* rotation causes the short end to *approach* the observer as it crosses the rest of the rope. This indicates that the turn is *left-handed*. If now you like to make several such clockwise turns in stiff wire, some receding from the observer and other approaching him, you will find the left- and right-handed varieties are clearly distinguishable, no matter how much they are shuffled about.

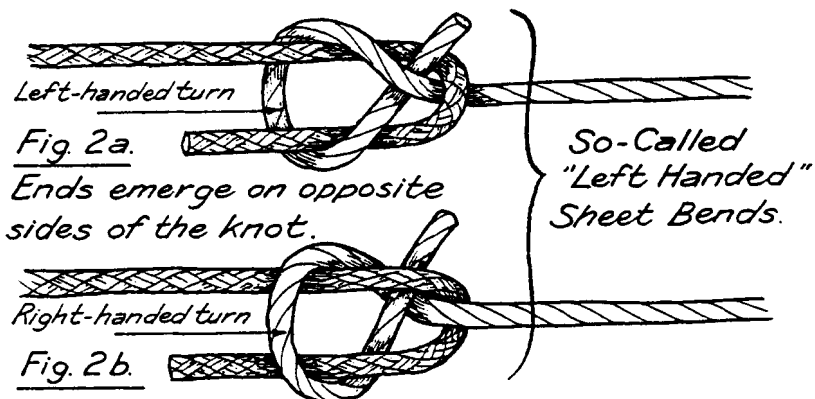
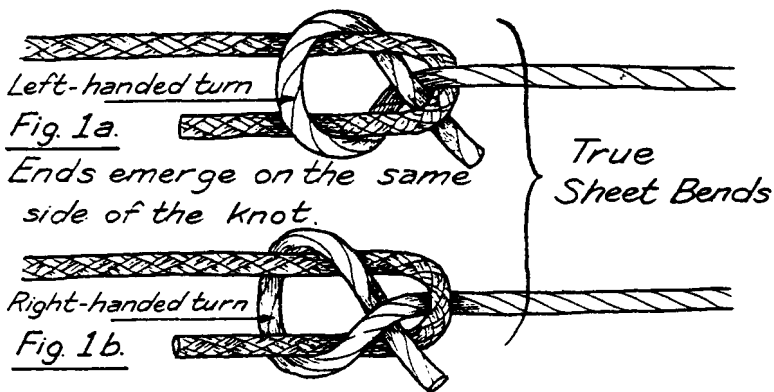
In Fig. 1b the rotation is clockwise and the end recedes from the observer. The turn and the knot are therefore *right-handed*. Lengthening the short end and shortening the long end does not affect the handedness or 'sense' of a turn.

All knotters must admit to some initial difficulty in grasping the notion of the 'sense' of a turn, and failure to do so accounts for the widespread confusion

concerning the true and the so-called 'left-handed' forms of the Sheet Bend and the Bowline. With the present nomenclature we have to realise that the 'Left-Handed' Sheet Bend can be tied in either left-handed or right-handed form, as illustrated in Figs. 2a & b.

The feature which distinguishes the two *true Sheet Bends* of Fig. 1a & b is that in the true knots the two ends emerge on the same side, whereas in the so-called "left-handed" variety they emerge on opposite sides.

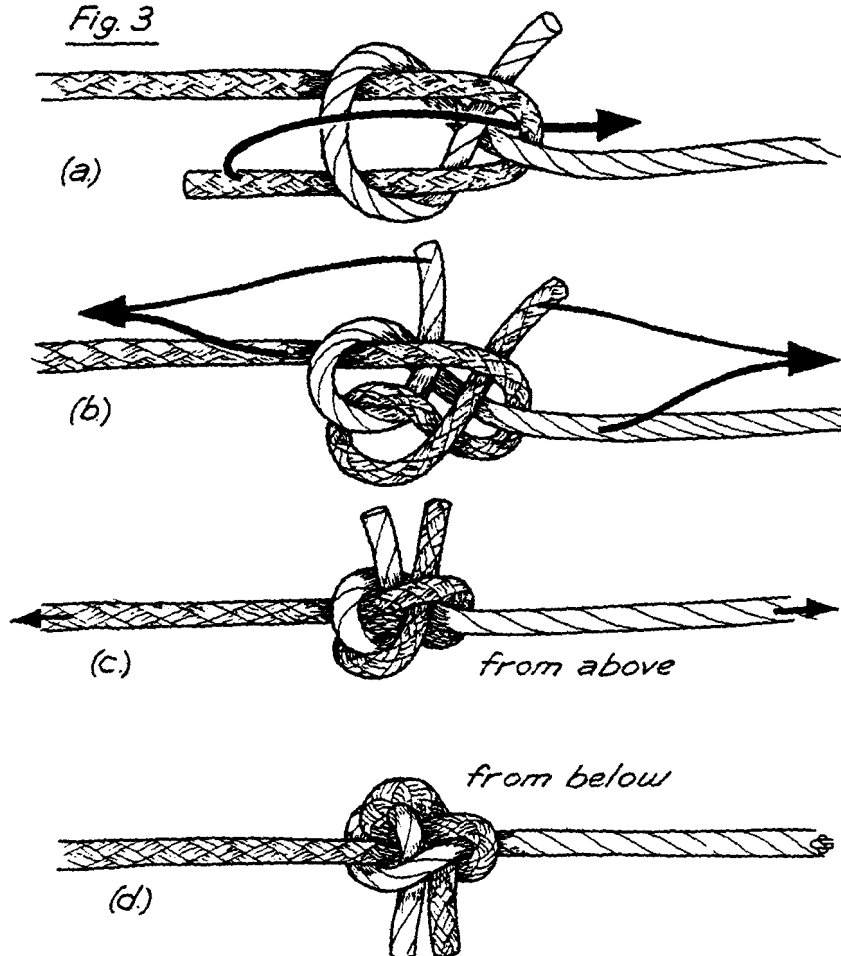
I get the impression the most British and USA sources condemn the so-called "Left-Handed" varieties as being less secure than the true forms. Ashley p.17, #67, says: "The LEFT-HAND SHEET BEND....has a poor nip and is unreliable." I do not believe that this opinion is held in other countries. Can Guild members help? One difference which seems to me important is that the so-called "Left-Handed" variety lends itself to the addition of one further tuck as shown by the strong arrow in Fig. 3a. Pull up initially as in Fig. 3b. and finally on the long ends only. You get a more secure knot, with the two short ends emerging neatly together. In new braided rope the knot can be broken smoothly by pulling these ends apart strongly. When I first produced this knot I thought it was new, but when Stuart GRAINGER agreed to illustrate it for me he happened to show it to our one and only Charlie SMITH, and



A So-Called "Left Handed" Sheet Bend may be tucked with advantage.

there we were straight back into antiquity, for Charlie at once said his grandfather who had served in sailing ships always told him that in heavy weather a Bowline should be made with an extra tuck like this one. The Bowline and the Sheet Bend are essentially the same knot, so I cannot claim that the knot described here is mine; but it has been fun to find myself in such distinguished company!

Fig. 3



Note that the ends emerge together.

The Tucked Sheet Bend.

LETTERS

Owen K NUTTALL writes.....

With reference to the letter by Vaughan JONES in KM43 A LOOP TO SECURE OBJECTS...Look no further than the CONSTRICTOR KNOT, a double loop that can be tied in a bight. Method of tying: Hold the left hand standing part across the fingers of your left hand above your thumb. Form a figure of eight with the right hand working end. (Starting from the bottom going clockwise). The right hand working end should now finish facing right, parallel to the left hand standing part. Now bring the left hand standing part over the top loop of the figure of eight. The left hand part should now face its original position. Fold the bottom loop on the top of the figure of eight, slip the doubled loop over any object, pull the two standing parts in opposite directions to tighten. This double loop has a grip like a vice. I use this knot frequently in my work as a builder. This knot is very trustworthy, I hope you like it.

oooOOOooo

Richard M. ROMING of MD USA writes..

I recently got home from a lengthy stay in hospital having a below the knee amputation. At home now under the watchfull eye of the most wonderful nurse in the world - my wife.

My hat is off to Stuart GRAINGER for his wonderful illustration of the DALIA KNOT, KM44 p.25. Garret Smith would applaud his work, were he still with us.

Out on Log Islend (Long Island) where Smith and I grew up we often referred to the Spanish Hitching (KM44, p28) as "Gracklin"; a reference to a crow-sized black bird, Grackle. Later I've heard gracklin used to identify the type of hitching used when covering the bulked innards of a bow pudding or fender for tugs etc....

I enjoy reading KM but I sure get lost when long-winded mathamatical explanations by those "perfessers" from Down Under are included. I'd rather see pictures or other members work, tools, etc. Now that I'm finished with sea duty I'll have time to put together some short articles that may be of interest to our members

oooOOOooo

By Ed...

I get several letters about the "academic" articles, some complimentary, others not so complimentary; one or two unprintable. We are an International Guild, formed as a association of folk with interests in knots and knotting disciplines of ALL kinds - probably encompassing the widest variety of different interests known to any such association - all of whom should be represented in our newsletter. However, I can only publish articles that you, the members, submit; so take heed of the saying "The pen is mightier than the sword" - instead of fighting GET DOWN TO WRITING - or persuading someone else to.....*Gordon*

BOOK REVIEW

KNOWING THE ROPES

A Sailor's Guide to Selecting, Rigging and Handling Lines Aboard

By **Roger C TAYLOR**,
Illustrated by **Kathy BRAY**

Published (1989) by International Marine Publishing Company Distributed (U.K.) by Airlife Publishing Ltd., 101 Longden Road, Shrewsbury, SY3 9EB.
ISBN 0-87742-970-7

Price (U.K.) £15.95

"I just love....all that new rope.....you can never have too much rope around a boat...I'm always tempted to buy some." So starts the author. Already I like him. He then sets out to show how - when mechanised fittings fail - to introduce simpler, cheaper, less strenuous and more elegant ways of handling lines on modern yachts and dinghies. An introduction describes the choice, use and care for rope; making basic knots and splices in it; and how to coil, whip, marry, haul on, reef and lash it. This is followed by traditional cordage contrivances which include lazy jacks, downhauls, vangs, preventers and tackles. Anchoring, mooring and berthing, securing gear, and hoisting loads, are also detailed. It's an easy but instructional read, with just the occasional trans-Atlantic word to remind us that the author was a U.S. Navy Commander, editorial director of the U.S. Naval Institute, and founder of

International Marine Publishing Company. He now sails full-time. This is a soft cover book, approx. 9" x 7.5", with 146 pages and abundant clear line drawings. Appended - nothing to do with knots - is a discussion of sea language, helpful if you don't know a luff from a lazarette, or sea from scend. My only quibbles: Mr. Taylor omits to say that his rope sizes are diameters (I guess they are); I'm not keen on triple square (reef) knots or round turns with THREE half hitches; and the book is a trifle pricey here in the U.K. Otherwise, sailormen and women (blue water, coastal, sheltered or armchair), with 60 to 600 square feet of sail, could spend a worse Winter than assembling versatile standing and running rigging from this useful manual.

G.B.

oooOOOooo

DEFINITIONS

VANGS: The braces that keep steady the peak of gaff-sails and fore-and-aft sails.

PREVENTERS: Additional ropes employed sometimes to support or answer the purpose of another that has a great strain upon it, or is injured. such as stays, shroudsbraces etc.

(From: The Art of Rigging - by George Biddlecombe)

GUILD SUPPLIES

I.G.K.T. BOOK PRICE LIST 1994

ITEM	WEIGHT	PRICE
POSTCARDS		
Set of 8 instructional (Brown & Cream)	35 gms	£1.50 Set
POSTCARDS		
Set of 8 Single Strand Ornamental Knots (White on Blue)	35 gms	£1.50 Set
TIES		
Polyester (Dark blue, with white Knot motifs)	30 gms LONG	£8.95 each
	30 gms BOW	£7.80 each
BADGES		
Guild LOGO	5 gms	
Enamel Brooch Type		£1.80 each
Cloth, Blazer Type		£1.00 each
Car Sticker (Soft Plastic)		£1.00 each
3" (75mm) Pressed Printed Metal		£0.30 each
7" Display Stand Logo		£7.50 each
KNOT CRAFT - THE VIDEO elementary teaching aid VHS or NTSC		
Stuart Grainger	270 gms	£8.50 each
T-SHIRT		
Size - L	145 gms	£6.95 each

SUPPLIES SECRETARY

3 Walnut Tree Meadow

Stonham Aspal

STOWMARKET

Suffolk IP14 6DF

Tel: 0449 - 711121

