TEE EMM

Vol. 5. No .2 May 1945

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Vol. 5 No. 2 **TEE EMM** May, 1945

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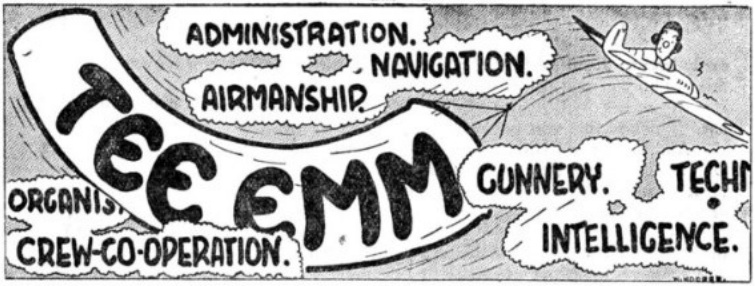
Pilot Officer Prune says—"Take Tee Emm regularly ! Prevents that Thinking Feeling !"

TEE EMM AND A.M.O. A.1114/44

For the present, Tee Emm is being distributed as heretofore and A.M.O. A.1114/44 does not apply to this publication. That is to say, Commands need not include us on the 818 they make out for other air publications. Changes in numbers of copies of Tee Emm required by units should continue to be notified direct to Editor, Tee Emm, Air Ministry, Kingsway, W.C.2, not to A.P.F.S., and these changes will be incorporated in the Tee Emm 818, on which distribution throughout the Service is based



"I hope that these Training Memoranda will continue to be as widely read and studied as they have been during the past four years. It is impossible to exaggerate the importance of constant training in ensuring the highest operational efficiency"

Marshal of the Royal Air Force, Chief of the Air Staff

Low-Flying is Lovely, but . . .

THERE is certainly a fascination about low-flying. Low-flying is lovely. To see the fields, hedges and houses flash past at lightning speed under your wings makes you seem to be going so much faster than when you are flying high up. And this enhances the exhilaration which all speed brings. To see little white faces upturned in awe and perhaps envy, cattle stampeding, girls waving, even people ducking and half-running, always kindles in you a grand sense of power, makes you feel fine, right on top of the world. You think of it all with longing when you are once more earthbound. You want to go out and do some more of it.

Well that's all very well as long as it's authorised low-flying over the proper areas. But unauthorised low-flying should be out, repeat *out*. However great the temptation you *must* resist it.

Resist it right at the start. For there is always that first moment when you think how nice it would be to do a spot of beating up a village or hedge-hopping; and then is the time to be firm with yourself. You are about to disobey orders wilfully. You will be liable to court-martial if caught. And court-martial may

easily lead to dismissal from the Service. In very many cases it already has led to this. Think of that before you yield to temptation.

Again, low-flying may easily lead to accidents. In innumerable cases it already has. Think of that, too, before you yield to temptation.

And if you are still tempted think of the normal results of such accidents. One minute you are fit and full of life, full of pride in yourself and your flying. Next minute, where are you? Maimed for life, or mangled beyond recognition, or burnt to a shapeless mass, or spread over the countryside. And we use the phrase "spread over the countryside" in its most literal sense. Here is an extract from the report on a recent accident which occurred during unauthorised low-flying.

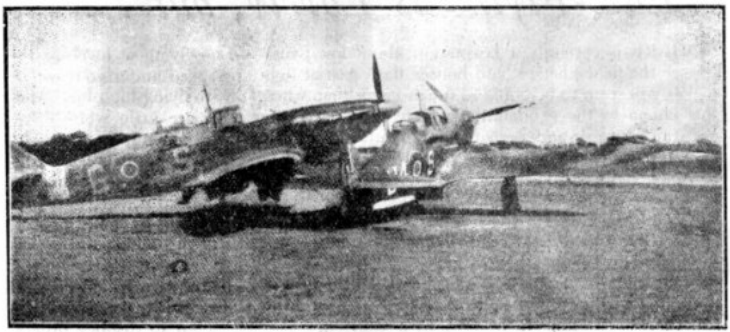
"Search of the wreckage of this machine and surrounding fields resulted in the collection of various human remains. Those identified were strips of skin from scalp including left ear, back and left arm, badly fractured left forearm and portions of vertebræ column. A number of smaller portions were unidentified. Decomposition was so far advanced that no useful purpose would be served by forwarding portions to the Laboratory for investigation.

"Identification was obtained from names and numbers, upon articles of clothing attached or adjacent to the remains.

"Death was due to gross multiple injuries."

Not a very nice ending to a joyous bit of low-flying is it? Think of that report next time you are tempted to disobey orders—and *don't*.

Is Your Accident Really Necessary?



Putting an end to Defiance.

A Tale of a Tug

It wa:n't me, says Prune.

A CERTAIN Chief Instructor was checking out a Flight Lieutenant as an Instructor on night-tugging. They taxied on to the flare path and were hitched up to a glider, but in the course of performing various other vital actions neglected to switch on their formation keeping lights. The glider pilot called up over the R/T to point this out to them, but owing to the fact that they were listening out on channel " A " instead of channel " B," he failed to make contact. As a result, when the tug started its take off run the glider decided it was best to release.

The exercise that should have been carried out was circuits and bumps, during which the glider usually releases on the downwind leg of the circuit first time around. After a couple of circuits, however, the C.I. remarked to the F./Lt. that the tug they were flying must be a pretty good aircraft, because with – 3½ lbs. boost they had difficulty keeping their speed down. After three more circuits, the C.I., thinking that something was wrong, looked out behind. Seeing nothing there he remarked to the F./Lt. that the glider appeared to be in difficulties, because his Nav. lights were out.

After continuing for two more circuits, they dropped their rope and landed. The C.I. then walked over to A.C.P. and tore him off a trip for not telling him over the R/T that they hadn't got a glider on tow.

Ah, well, it takes all sorts to make a world.

Going to India . . .?

ARE you posted overseas ? To India or Ceylon ? A word, then, about the things you should take with you, and the things you should buy when you get there. It would, of course, be a lot easier to tell you what *not* to take with you (*e.g.*, dogs, polo-sticks or your best girl), since no two people are likely to feel quite the same needs when campaigning in a hot country. However, here are a few good points worthy of your attention.

Firstly, clothes. The Service scale of Tropical Kit, issued to airmen, or to be bought by officers, will only serve as a basis for your wardrobe. You will need more clothes than that, many more, as soon as you get to India, or wherever it is. Working in the heat makes frequent changes necessary, for every reason of comfort and hygiene. " Dressing for dinner in the Jungle " no longer means a black tie ; but it does mean a clean bush-shirt and slacks, to make you feel a new man after a hard, hot, and dusty day—and to avoid the accusation that somebody's mother isn't using Persil.

Laundry in India is performed by "dhobies," much of whose work consists in pounding your clothes smartly between jagged stones, small quantities of soap and water being added to the process from time to time. This is inclined to be destructive to the clothes, particularly the buttons, so you should provide yourself with a handsome number of shirts, shorts, slacks, and bush-shirts, and so avoid being caught out just when you want to feel clean or look smart.

You will not find it expensive to outfit yourself. There are quantities of tailors in India and Ceylon. Every camp has at least one licensed tailor's shop where prices are "pegged." If you are within reach of a town you will find many more. We recommend you to buy the bulk of your tropical dress on arrival, and only take with you sufficient for the voyage out. Besides, if you are going by air you will be strictly limited as to what you can take, since your kit must not exceed 65 lbs. Khaki drill is to be had in India from Officers' Shops, from Stores (for airmen), and, in varying qualities, from the tailors themselves.

The bush-shirt, which is a loose tunic with large pockets, a belt, and open collar, is far and away the most useful type of shirt both for work and leisure. It is also perfectly correct wear, day or evening, anywhere from your mess in the Forward Area to Viceroy's House at Delhi. All shirts should be made with long sleeves, to be turned down in the evening, thus baffling mosquitoes.

You should also take with you a good suit of blue with accessories—shirt, socks, tie and braces—and a greatcoat and raincoat as well.

Officers need not buy topees as the slouch hat is now worn in India, and is at present obtainable on arrival there. Until such time as they are available for purchase in this country, you can obtain topees on loan from the P.D.C. for the purposes of the voyage out.

Take with you all the shoes you possess. Boots are only worn in the Forward Areas, and with Jungle flying-kit, and if you are posted anywhere else you won't wear them. Mosquito-boots, which are issued to airmen, and which officers can buy quite cheaply, are meant to be worn in the evenings. This is a malaria precaution, and malaria precautions are strictly—and rightly—enforced all over ACSEA. Shoes and boots of all kinds can be bought easily and cheaply anywhere in India. There is usually a shoemaker, licensed like the tailor, on every R.A.F. station.

Take plenty of linen with you—and a decent supply of handkerchiefs. You will be surprised to find how easy it is to catch colds in a hot climate. Indian handkerchiefs are neither very cheap nor very good.

With regard to luggage—try not to take too much. A light zip-grip or suitcase is the form: *not* fourteen steamer trunks. You will find, in a hot country, the fewer possessions you have to worry about, the happier you'll be. Moreover, valuable personal possessions such as typewriters, golf-clubs, cameras, watches, and fountain-pens—indeed, almost anything new and so eligible for resale—are in danger of being stolen, when you'll find they are difficult and expensive to replace. So, unless you think them quite indispensable to your happiness, leave behind such things of value as can't be carried on your person.

If, in spite of warnings, you are going

to take half your worldly goods along with you, at least make sure that what you take will be useful. Books, for instance. If you are fond of reading, you'll need some books, preferably of the more solid and satisfying kind. You may well find yourself stationed somewhere where your recreations will be left entirely to you. Under such conditions, surprising numbers of people have discovered a taste for reading. (Even Prune, whose reading has hitherto been confined to *Lilliput*, *Men Only* and *Art Studies*.) And if you have a taste for reading already, you'll want books very badly, particularly should you be stationed out in the blue.

You will do well also to take with you plenty of writing materials: notepaper and envelopes may be hard to get, and letter writing will assume an importance in your life it possibly never had before.

All odds and ends of toilet things—soap, shaving soap, toothbrushes and so on—can usually be bought quite easily out there, and at quite reasonable prices. It would, however, be worth your while to take with you any minor matters of First Aid you feel you may need, if only to save yourself being stuck for an aspirin or a piece of sticking-plaster on a long train journey, or at any time when you are away from civilisation.

One really worth-while piece of equipment, which cannot be bought in the East except at a colossal price, is a large thermos-flask. This is used, in India and other places, to keep cold drinks cold, and it is a very great aid to comfort, particularly for aircrews on long trips. If you can buy or borrow one—the bigger the better—before you leave England, do so. You won't regret it.

"But I am travelling light," says Prune.

"Travel light!" should be your watchword. As time passes and we shift further into Burma and neighbouring countries, you're likely to find yourself moving forward in a hurry, doing all your journeys by air, and carrying all your belongings in your own aircraft. If you are a single-engine pilot, you can see that this implies considerable curtailment of the size of your baggage. Still there are very few things in this world we can't do without if we have to. Collect your absolute necessities into a small space, so that they can accompany you wherever you go.

Well, we hope the foregoing has been of value to you. Don't thank us—it's just the TEE EMM service!

Ship Recognition

(This article was originally published in "Flight Deck" for the benefit of F.A.A. types, but as it is of considerable value to the Coastal boys who may not have seen it, here it is again.)

Whose?

VERY few people can distinguish the male Yak from the female Yak—except perhaps another Yak, and then, of course, he has to! Otherwise he is liable to find himself in a lot of embarrassing situations, which we needn't detail. A Yak's failure in recognition is not likely to produce nearly as embarrassing a situation as that facing the Air branch pilot or observer who closes to within nodding range of what he thinks is the *Howe* only to discover that it is the *Nagato*.

Ship recognition has always been important, but in the Pacific it is going to be far more important than ever before. It would be no great exaggeration to say that on efficient ship recognition will depend just how long it will take to polish off "honolable Jap navee." We would be the last to deny the value of the hard and fast rules laid down for ship recognition. Thorough knowledge of type and national characteristics is the essential basis of good recognition, and you can only keep up to date on these by constant reference to recognition manuals and silhouettes. Whilst you are delving among the silhouettes may we suggest another line of approach, that of getting the "general impression" of a ship to register in the old brain-box so that eventually you recognise a ship from her general "set" and without having to refer to text-book statistics. After all when you meet Bill Bloggs in the mess, you recognise him at a glance without having to say to yourself "Missing tooth left side upper set, eyes well forward and prominent bridge—ah Bill Bloggs." (And just to stave off the flood of indignant letters to the editor, we had better point out that Bill Bloggs is a purely fictitious character.)

Believe it or not, it is possible with practice to recognise ships in this fashion. The operative word is practice and you can't get that practice unless you are prepared to do a spot of work on the photographs of all the ships you are ever likely to meet. If you have used the counting of turrets and funnels method in the past and nothing else—then we suggest a trial of the method by which we recognised Bill Bloggs.

Get the " look " of the ship. It's a combination of appreciating its proportions and disposition of components without consciously interpreting these components and proportions into terms of superstructures, turrets and the like.

You do it all the time with other things—for instance cap recognition in the cloak room. In one single glance you take in that twist in the peak, that odd crease in the port side, that bend back of the badge, without realising you are doing it.

But then you've seen your cap many many times—and the moral is that if you want to recognise your ship then you've got to study its likeness many many times.

On the success of your study may hang the difference between you torpedoing the *Nagato* or simply being shot down by it, so the method seems well worth a trial.

Incidentally, we think this method should be called " Ship appreciation " just as, we feel certain, our shaggy friend from Tibet calls his little encounters, " Yak appreciation ! "



Fire !

THE following article appeared in TEE EMM for June 1943. The subject—and the advice it gave—has been considered important enough for the Authorities to ask us to reprint it in case any readers missed it. (And incidentally in case any readers didn't miss it, but missed the points in it !)

Fires in aircraft have three main causes :

(i) Enemy action. These fires can start anywhere in the aircraft from engine to tail unit—it depends on the enemy ;

(ii) Something going wrong in the engine which has nothing to do with the enemy. These fires naturally start in the engine and are known, not unreasonably, as engine fires ;

(iii) Spontaneous combustion. This is quite rare but when it does occur may be almost anything from a short in one's electrical pants to fusing of the inter-com. during a heated air-bomber *versus* pilot controversy.

In this article we are solely concerned with item (ii), engine fires—and what to do with them. This is a very important subject for your consideration at any time, and particularly so at the moment because the whole procedure has just been completely changed.

Under the old system the extinguisher automatically flooded the engine compartment with fire-extinguishing fluid as soon as the fire started. At the same time the pilot was supposed to turn off the petrol and open the throttle. This was based on the idea that most fires are carburettor fires and the proper course,

therefore, is to suck the flames into the bowels of the engine which are designed to digest them without inconvenience.

That procedure is now out of date. The modern carburettor very rarely catches fire in the air and the vast majority of present-day engine outbreaks are due to disintegration of those bits of metal that thrash around inside the crankcase. This disintegration can be caused by running out of oil or coolant, enemy action, overloading, or just plain honest-to-God engine failure. The net result in any case is that pistons, connecting rods, and other vitals cease to follow the paths their designer intended and form a sort of Soviet of miscellaneous salvage. The engine resents this and as a rule at once starts pouring out oil and petrol on everything within reach. The result is nearly always a fire.

Now if the pilot employs the old procedure of pressing the extinguisher button, turning off the petrol and opening the throttle, the fire may go out, but it will probably start up again as soon as the extinguishing fluid is used up—a matter of 10 seconds. The blower and its blowings start playing the part of a giant welding torch and the oil pump does its best to help. All this, plus the air flow over the nacelle, produces enough heat to melt the wing front spar within 1½ to 2 minutes. Most people find this extremely inconvenient and citizens have been known to leave the premises via the escape hatch without further delay, being more than somewhat apprehensive of future developments.

But under the new system the extinguisher is under the pilot's control via a button in the cockpit. It will not, repeat not, poop off automatically, because, if it did, you'd probably, as we've said, only find the fire on your hands again 10 seconds later. The drill now is at once to CLOSE THE THROTTLE, FEATHER THE PROPELLER AND TURN OFF THE

P.O. Prune has his own method of putting out engine fires.

PETROL. If you get cracking on this you may not need to use your extinguisher at all, but if the blaze is ambitious wait till the prop. has stopped and *then* press the extinguisher button. This is known as "holding your fire" and is in accordance with the best military principles. In other words, keep your extinguisher in tactical reserve, which is also in accordance with the best military principles. The new procedure is giving very good results and there is a growing list of satisfied customers.

So Remember :

(i) FORGET THE OLD DRILL
(ii) CLOSE THE THROTTLE
(iii) FEATHER THE PROPELLER
(iv) TURN OFF THE PETROL, and
(v) WHEN THE ENGINE HAS STOPPED, PRESS THE EXTINGUISHER BUTTON.

Do not on any account try to restart the engine. The extinguisher will not work twice and if you do catch fire a second time there is just nothing you can do about it.

How are you on the Link?

HERE'S a nice little Link Trainer exercise, invented by some bright Instructors at a (P) A.F.U. Other stations might care to try it; if correctly carried out you'll be surprised at the result. Prune, indeed, would be more surprised than ever before in his life—in the remote contingency of his getting it right. But then he's never got anything right yet, so he's reasonably safe from shock.

EXERCISE

Start

200° for 1 min.
LEFT Rate 1½ on to 032
032 for 1 min.
RIGHT Rate 1 on to 208
208 for 1 min.
LEFT Rate 1½ on to 045
045 for 50 secs.
LEFT Rate 1 on to 216
216 for 1 min.
RIGHT Rate 1½ on to 023
023 for 1 min. 10 secs.
LEFT Rate 1 on to 218
218 for 1 min.
RIGHT Rate 2 on to 358
358 for 3 mins.
LEFT Rate 1½ on to 182
182 for 3 mins.
RIGHT Rate 2 on to 320
320 for 30 secs.
LEFT Rate ½ on to 270
270 for 30 secs.
LEFT Rate 1 on to 120
120 for 1 min. 10 secs.
RIGHT Rate ½ on to 180
180 for 1½ min.
LEFT Rate ½ on to 075
075 for 2 min.
LEFT Rate 1 on to 020
020 for 2 min.

Finish

Try it and see what answer you get. *We* know what it is, but we're not going to tell you!

This Month's Prunery

THE MOST HIGHLY DEROGATORY ORDER OF THE IRREMOVABLE FINGER (Patron : Pilot Officer Prune) has this month been awarded to Flight Officer —— of Bomber Command for Refusing to be Fooled.

This W.A.A.F. officer rang up a Squadron Leader at Fighter Command H.Q. and asked for help in tracing some Wellington aircraft, which were using the same identification letters as one of the B.C. Squadrons and had been last seen flying in the vicinity of F——.

The Squadron Leader made various telephone calls to F—— and elsewhere in an attempt to track down the aircraft concerned, and at last discovered that there was a Wellington Squadron at T——, a Coastal Station. He thereupon rang the Flight Officer and told her that he had been able to trace a Wimpey Squadron at T—— which might be the one she wanted. She thanked him very nicely for all his trouble but regretted there must be some mistake as the aircraft she was trying to trace were Wellingtons.

The M.H.D.O.I.F. has also been awarded to Squadron Leader —— of R.A.F. Station H—— for Rendering a Dubious Return.

In order to check on all suitable accommodation in Home Commands an official letter was sent out asking for meticulous care to be exercised in rendering Accommodation Returns. The above officer sent in—under the Section "Misappropriated Buildings"—the following statement :—

"All married officers' quarters, except Nos. 8 and 9, are misappropriated in that they are used for single officers and W.A.A.F. O.R's. In all cases the floor space has been calculated according to the personnel occupying the quarters."

The M.H.D.O.I.F. is also awarded to F/Sgt. —— for Determination to Press On In Spite of Obstacles.

This pupil pilot, while taxying from dispersal one morning encountered a number of obstacles on the perimeter track, namely red glim lamps and a row of tar barrels. Not wishing to disturb Flying Control with his R/T he promptly ordered his crew to remove said obstacles so that he could taxi on. Luckily he was prevented from doing so.

On stating later that he thought the obstructions were left over from the previous night's night-flying taxi path, it had to be pointed out to him that the unit did not use lighted tar barrels to mark taxi tracks and that the obstacles had been purposely placed across the track to indicate that the portion beyond was unserviceable. This information appeared to come to him as quite a surprise.

Live to Fight Another Day

LAST month in this series we published an account of a pilot's survival in the jungle and at sea. We had also asked the experts, if you remember, to stand at our elbow and make helpful comments on various points of interest.

Here is another story of a pilot who baled out over the jungle and was ultimately rescued, though not till after a fairly tough sixteen days. It shows very clearly the sort of trials and difficulties you will have to overcome, but this time we'll leave you to pick out the lessons yourself. Read it carefully: you can learn a lot.

IV. Sixteen Days in the Jungle

I landed safely but my parachute was caught in a tree. I hauled it down and got out a machete knife with which I started to cut the cords.

As I was doing this I heard sounds and dashed into the jungle further up the hillside, leaving my parachute behind me. I was unable to move fast with the loaded Beadon suit,* but soon found a cave to which there was only one way of approach. Looking through my kit while there, I found that I had lost my rations, as the pocket had torn. I stayed there for about ten minutes, at the end of which I heard some excited shouting —probably my parachute being found.

Thinking it best to move again I pushed further up the hill into solid jungle in a S.E. direction. Being tired I lay down in the thick undergrowth, and stayed there until dusk. I felt that I should have adequate warning of anyone approaching by the noise in the undergrowth. I knew my position to within a mile or so and realised from briefing that the Japanese were in the area.

As dusk came on I noticed several fires just below me which increased rapidly and came nearer. I think they were started with the intention of forcing me further up the hill on to the track above. I therefore moved along the side of the hill, keeping fairly close to the fires, until I could again hide.

While in my new hiding place I heard voices and found I was about 6 feet below a clearing. I looked out and saw two people passing to the right of me. I believe they were Japanese and so I

* Jungle suit containing all necessities for maintaining life and effecting escape.

decided to move further down the hill away from the clearing in a northerly direction. Eventually I found some thick undergrowth and lay there dozing until about 05.30 hrs. next morning.

On the second day I moved further down the hill towards the *nullah* (small valley). This meant crossing a bare ridge which had been cleared of jungle by fire. As I crossed the ridge I saw a native hut about a hundred yards away with two Japanese looking straight at me. I think they saw me and became suspicious. I rubbed earth and ashes on my hands and face and crawled to cover to the right. During this time I heard a bird-like call rather like a parrot, but more metallic. I think, in fact, that it was a Jap signal, as it came from the direction of the hut. Eventually I reached the *nullah* and, after looking around carefully for some time, finally decided to risk getting some water. I got down to the stream and filled my *chorgol* (canvas bottle) quickly and crossed over to the other side. This was about 06.00 hours. I carefully studied the hut but could see nothing and moved up the side of the hill. Most of the day I kept moving, keeping to the side of the hills and following the ridge, covering approximately 9 miles.

You never know what—

At about 18.30 hours I decided to make myself comfortable for the night. I cut several small bamboos and placed them against a rock which was overhanging. I then cut some saplings to thatch the bamboos and covered the structure with leaves, making it waterproof. I lit a fire to dry my socks, but a thunderstorm broke almost immediately and I got into my shelter. I lay there for a minute and felt something wriggling beneath me. It was a snake ; it crawled over my body up to my chest and then slid off. I kept quite still and eventually it curled up beside me. I eased away from it. The snake was about 4 feet long and 2 inches thick. It continued to rain heavily and I finally went to sleep.

On the third day I woke about 05.30 hours and slid cautiously out of my shelter in case the snake was about but I did not see it again. I made my way up the hill and saw a Naga village about a hundred yards below me on the other side of the ridge. I decided to avoid this as the ridge was difficult to cross with little cover, so I turned north, intending to meet the stream again, which I did eventually, and followed it down. I turned west after a time up the watershed and came to another hut which I watched carefully. I finally approached it and found some rice. It was still in the husks, but I filled three of my pockets. I followed the Naga track past the clear-

ing, then went a few yards off the track in the jungle and tried to grind the rice with a couple of stones but I did not have much success. I then saw a Naga coming up the path. I saluted him in friendly fashion as instructed in " Under the Greenwood Tree," but he did not seem to take much notice. I made signs that I wished to go to a certain gap in the hills which was on my course to ——. The Naga led me up the path and we broke jungle about fifty yards from two huts in a clearing. I saw two people walking about with light skins, much lighter than that of the Naga, and felt certain that they were Japanese, as they wore peaked caps with ear flaps. I stopped and the Naga pointed and said " *Japon*." I ran back down the path into thick undergrowth and lay there all afternoon until dusk. The light was then getting so bad that I decided not to go on and slept on the bare ground in the undergrowth. I dozed a little but the wet came up from the ground and I was very uncomfortable.

On the fourth day I set out at about 05.30 hours. I continued up the hill and came upon another small clearing with a hut in it. I watched very carefully for a time and seeing no one, went up to it. There were a few sweet melons outside. I took one and entered the hut where I found a mealy corncob. Then I proceeded up the hill. Fairly soon after I had found the melons I lost my *chargol* and the next day I lost my machete knife. The *chargol* was lost in thick jungle and the knife slipped out of a hole in my pocket.

During the next seven days or so I kept to a fairly rigid drill by moving from 6 o'clock to 8 o'clock, then a twenty minute rest, moving again until 12, then an hour's rest, moving from about 13.00 to 15.00, followed by another twenty minutes rest, then carrying on to about 18.00 hours. I always took care to make myself fairly comfortable for the night and never again slept on the hard ground. I did not experience very great hunger and rationed myself with small pieces of melon (about two square inches) and corn from the cob (twelve grains per day). This gave me about two meals a day. Once when I had nothing left, I saw some stale goats' dung and ate a little of it. It tasted rather like spinach I thought. I tried fishing from time to time but could not discover a satisfactory bait. Occasionally I ate nuts which I saw baboons eating. I sometimes ate berries and followed the principle that those which tasted sweet were good and those that tasted sour were bad.

For water I had no difficulty. There were plenty of streams and I drank a tin

—may be in a jungle.

of water each day, filling the bakelite cylinders, which kept me going for the rest of the day. It was part of my drill to wind my watch every day and whenever I could I washed and soaked my feet in water for about ten minutes.

On the fifth day I camped near the junction of two rivers and treated some blisters on my feet with sulphanilamide and washed and dried my feet and socks. I dressed the blisters daily and they soon recovered. My feet kept in fairly good condition.

On the sixth day I tried to cross the stream which was deep and fast. I lost my footing and was swept back into a deep pool. I struck out for the other side but was hampered by my Beadon suit and boots. Several times I went under and swallowed a lot of water. Eventually I managed to make the bank and felt very exhausted when I climbed out. When I began to feel better I put out my matches and maps to dry.

After I had rested I began to move up the river. From time to time I saw rough fishing rods stuck in the rocks but no fish. I tried to make a shelter for the night but did not succeed very well.

On the seventh day I started to climb a hill ; it took me all day and I cannot say where I camped that night. I came subsequently to a clearing which was on the ridge. I heard something in the jungle and a black panther rushed across the clearing and swerved away from me. I decided I had better hide in the undergrowth so that I should hear it if it approached again. I heard noises for about a quarter of an hour and I think the animal was stalking me, but I duly found a position which could only be approached from one direction and waited. Eventually the noises ceased and I moved on.

I was now getting very exhausted indeed. I lay for a long while and decided that it was not worth going on. I felt very depressed and wondered if the best thing would be to end it all, but after some time I started moving on. I climbed the ridge and saw a Naga village to the N.W. in the valley ; I could not make up my mind whether to approach it or not, so decided to camp for the night. I made some sort of shelter out of thick grass and my usual bed out of the undergrowth.

On the eighth day I went down to a stream following a Naga trail. I got some water and saw in the stream a thing which looked like a potato. I took a bite. There was a cut on my lips and immediately it swelled up and my tongue as well, very nearly choking me. I washed my mouth out but it gave me no relief.

I crossed the stream and got about 20 yards up the path when two Nagas and four women came down to me. I made friendly signs indicating that I wanted food and drink. They gave me some rice beer and some rice with raisins in it. The swelling went down a good deal during the day but was not quite well. A Naga led me up the hill which I could only climb very slowly, 20 yards at a time, till we eventually came to the Headman's hut and I collapsed on a bench. This was about noon.

From then on I was helped and eight days later contacted an Army unit.

Well, there's a fine record of endurance against difficulties. And—as we said before—study the points in it and learn from that pilot's experience.

THE SEVEN DEADLY SINS OF A.G.'s. No. 5.

Incorrect Timing of Combat Manœuvres.

Indian Notes—I

IF, or when, you go to India you will meet Indians both at work and play. Treat the Indians as you would a foreign ally and try to learn about their ways and customs. Always remember, it is their country. Let tolerance be your watchword and remember that our ways seem as strange to them as theirs do to us. On no account laugh at them. Indians are very sensitive and reserved. Whatever the temptation, do not shout at or bully them. Some "old hands" do this and because they make the most noise, they appear to get results. This is not the right means of approach, and if you look round you will find that those who apply the quieter technique have greater actual success. So treat all Indians with consideration. Be courteous, firm and scrupulously fair. This applies particularly to any personal servants you may have.

None Came Back: Why?

A CREW of five took off in an Anson recently on a night cross country. None came back.

The weather was not bad, though the freezing level was 2,500 feet and the icing index high. They had been briefed to fly at 2,000 feet on a route mostly over the sea so there was not much danger. Yet less than two hours later all five of the crew were dead and the aircraft was no more than a pile of rubbish on a hillside.

None of that crew came back. Why?

Generally it is not easy after a fatal and total crash to find out exactly what went wrong—unless investigation reveals some mechanical defect or failure—for those who could have told are no longer alive. But in this case the aircraft did not burn, and the logs of the Navigator and the Wireless Operator were recovered. And they tell the story only too plainly. The men in the aircraft were alone to blame.

For the logs reveal the following points :—

(i) Back-plotting showed that the D.R. position at the time of the crash was nearly 30 miles away from the actual position of the crash.

(ii) The Navigator's log recorded an unvarying height of 2,000 feet, while the crash took place at 1,050 feet above M.S.L.

(iii) When the crash occurred, the aircraft was under full power and climbing.

From these points and from a consideration of the actual weather, it appears probable that

(i) The Pilot was not flying the course logged by the Navigator.

(ii) Height was being varied without the Navigator being informed; or if the Navigator was informed, he ignored the information.

(iii) In the last three minutes before the crash, the pilot *either* climbed into thick cumulus cloud (Met: icing index high; F/L 2,500 feet), where icing-up caused him to lose control of the aircraft; *or*, seeing the hill immediately ahead, he attempted to climb over it instead of turning away.

Comment is unnecessary; no moral need be pointed. None came back and ***we know why.***

Doomie Says—

DON'T come down through cloud without knowing where you are.

E.V.T. Instructors

IN case you haven't seen a recent A.M.O. (A.120/45)—and it's wonderful how often people *don't* see A.M.O.'S—we'd like to draw your attention to it. That is, draw the attention of any of you who are contemplating becoming an E.V.T. instructor; because the A.M.O. in question is the one which governs and explains the terms of service for such instructors.

In brief, two types of instructor are required: educational and vocational. For the former certain specified educational standards are necessary; for the latter you must have civilian, professional, or trade experience.

Instructors are all volunteers and can be R.A.F. or W.A.A.F. officers or O.R.'s, but not normally above the rank of Flight Lieutenant for officers, or Flight Sergeant for other ranks. (If, therefore, you are an Air Vice-Marshal, we don't think you'll be accepted.)

The pay will, in general, not be less than what you're getting in your present service capacity; and—an important point, which we think we've mentioned before—employment as an E.V.T. instructor will *not* defer your release in the normal manner.

But it's all down in the A.M.O. If you're interested go and get it.

Sharks

THE following interesting article was originally published in *Coastal Command Review*, but since we feel that the web-footed boys are not the only ones who may fall into the water out East, we are republishing it here for our wider public.

A great deal has been written about sharks and extreme views are being expressed by two schools. One maintains that man has nothing to fear from sharks. In fact, the shark is such a timid and sulking creature that a harsh word or a smart slap will send him on his way with fear and terror in his heart. The other, however, maintains that so ferocious and deadly is the shark that man is almost his only prey. As in both arguments, truth is found in the balance of the two extremes. If forced to ditch in tropical waters, it is advisable to have some idea of the relative danger from sharks.

There are some eighty different kinds of sharks in southern waters. This

sounds a great many but less than a third of the species is harmful to man. The species most dangerous to man are the Mako, Tiger, Hammerhead, White, Grey Nurse, Ground and Blue Shark.

Some sharks live and feed at considerable depths and most of them feed on the ocean bottom. Hungry sharks sometimes will follow fish up to the surface and into shallow waters along the shore. When a shark explores such waters he is more likely to be dangerous.

Sharks seem to feed most actively during the night and particularly at dusk and dawn. After dark, they show an increased tendency to move toward the surface and into shore waters.

A shark's natural food generally consists of a wide variety of small marine animals such as fish, squids, crabs and shellfish. A shark prefers food which is fairly easy to get and especially goes after stragglers from schools of fish and after prey which has been wounded or helpless. He will follow a ship and eat garbage thrown overboard.

A shark first finds food by smelling it. A shark is attracted by weak fluttery movements and is repelled by strong, regular movements and certain loud, strange noises. There is popular superstition that sharks are blind. This is incorrect.

Wherever fish are being caught, sharks are likely to be found.

Although a shark will investigate any large floating object, it will not attack a man unless he is hungry. Often the shark will swim away after investigating. At other times he may approach and circle the object once or twice, or he may swim close and nudge the object with his snout.

When swimming, a shark cannot stop suddenly or turn quickly in a tight circle. A good swimmer can avoid a single large shark by evasive action.

A shark rarely jumps out of the water to take food, but he may seize his prey near the surface. For this reason, men on rafts are relatively safe unless they dangle their hands, arms, feet or legs in the water.

There is no need to be alarmed by jumping sharks. Such action possibly involves play or courtship; it does not mean that the sharks are feeding, hungry or vicious.

Protective Measures against Sharks in the Water

1. Keep a sharp look-out for sharks.
2. Keep your clothing and shoes on.
3. If in a group threatened or attacked by a shark, bunch together and form a tight circle. Face outward so you can see an approaching shark. If the sea is rough, tie yourselves together. Ward off attack by kicking or stiff-arming the shark.
4. Stay as quiet as possible. Float to save energy. If necessary to swim, use strong regular strokes. Do not make frantic irregular movements. When swimming alone stay away from schools of fish.
5. If a single shark threatens at close range :—
   (*a*) Use strong regular swimming movements. Try feinting toward the shark—he may be scared away.
   (*b*) Don't swim away directly in the shark's path. Face the shark and swim quickly to one side.
   (*c*) Kick or stiff-arm a shark to push him away, or grasp a side fin and

swim with the shark until you can veer away from it.

(*d*) Make loud sounds by slapping the surface of the water with cupped hands. Always use regular strokes.

(*e*) Use a knife at close quarters in a show-down.

(*f*) Use the shark repellant sparingly. Save it especially for use in water at night.

On a Raft

1. Don't fish from the raft when sharks are nearby. Abandon hooked fish if a shark approaches. Don't clean fish into the water when sharks are sighted.

2. Don't throw waste overboard if sharks are around.

3. Don't dangle hands or feet in water, especially when fishing.

4. If a shark threatens to attack or to damage the raft, discourage him by jabbing his snout or gills with an oar, but be careful not to break the oar, and don't take round-house swings that may upset you.

5. Fire a pistol above a shark—it will probably frighten him away.

6. Look for sharks around and under the raft before going into water or landing.

First Aid for Shark Victims

1. The first and most important measure is to stop the bleeding quickly. Help the victim into a raft or ashore as soon as possible. Stop bleeding and treat for shock, by giving morphia and fluids and by keeping the victim warm and lying down.

2. If in the water in a group, form a circle around the victim and stop bleeding by using a tourniquet improvised from an article of clothing.

Conclusion

There is no doubt that sharks, on occasions, do attack human beings, but the chances of encountering dangerous species are not great. If the protective measures given in this article are put into practice the probability is that even a dangerous attack will not attack.

Prune isn't frightened of sharks; they're frightened of him ever since he took to wearing shark-skin gloves.

Beaus in Burma

HERE'S a piece which we think is of considerable value to Beaufighter pilots flying, or about to fly, in Burma. It deals particularly with flying in monsoon weather and the gen it contains is hot from the griddle—in other words, it's from a recently returned pilot. He has had experience of three monsoons and reckons that his advice is probably the most suitable for Beau X's, which have a comparatively low ceiling and no oxygen.

Flying conditions in Burma are as a whole excellent between October and February. About the only snag is low-lying mist in the early morning. From March to May, however, conditions deteriorate. Heat, bumpiness low down, very bad haze and occasional vicious storms, all seem to gang up on the pilot of a low-flying aircraft and make his life more than somewhat unpleasant.

From June to September comes the south-west monsoon, bringing rain. And when we say rain, we mean rain in a big way, far heavier than anything you've met in England. Moreover, it has great penetrating power, which makes it very difficult to keep your wireless equipment at a high standard of serviceability.

But even heavy rain—most frightening in large quantities—need not worry you. The first thing to remember is to keep your gills closed; there's no need to use hot air. Should the air become too viciously bumpy and so make instrument flying very difficult, go back on a reciprocal. Fierce electrical storms should be avoided; there's no future in flying over Burma with your compass u/s.

The rain doesn't worry Prune.

When over the sea keep as low as possible, *i.e.*, 300–400 feet, and get under the storm rather than over it. Before going on to instruments, try to fly at 50 feet up and get the altimeter at 0 feet. This will give you a little to play with and allow for the drop in barometric pressure due to the storm.

Monsoon flying over hilly country is a little more tricky. Anywhere south of Imphal, *i.e.*, over the large majority of Burma, the highest mountain is 10,000 feet. If the weather is sufficiently bad to cause trouble, it will be definitely impossible in a Beau X to climb over it. So try going through at 12,000, giving a 2,000 feet clearance of the highest mountain. At this height oxygen will not be necessary, and the engines will still give – 2 lbs. at 2,000 r.p.m. In addition, you will be flying well below freezing level, which is about 15,000 feet.

If conditions are impossible, however, turn on to reciprocal and go back. *DON'T* start climbing. If you do, your engine power is reduced, and oxygen is needed—and not available. Moreover, icing may occur, which requires hot air, and thus further reduces available engine power.

Under no circumstances should you try descents, except visually or under wireless control. There is no future whatever in coming down on E.T.A. Hills over Burma are very common, and if a safe margin on E.T.A. is allowed for one range of hills, it may well bring you down on the next range of hills.

When coming home in bad weather, always get V.H.F. bearings to coastal stations, and lose your height over the sea. Ask for conditions at the Home Base; if they're bad you'll be diverted. There is a string of about six permanent airfields running approximately north to south at 20 to 30 minute intervals and conditions at one of them will always be suitable.

Finally, the following tips are worthy of note for monsoon fliers :—

(1) Never set out unless your V.H.F. is serviceable.

(2) Get a Met. report, if only to cover you if you do have to put in a 765C. Met. reports in India are always non-committal, usually gloomy and inaccurate—but you'll probably get into trouble with the Met. people for saying so! They do, however, predict the movements of major storms.

(3) If conditions are bad at base on take-off, allow at least one and a half hours margin on petrol after you return.

(4) Always check each compass course with your Navigator. If there is a large difference, and there is no reason to suspect either, fly on his compass.

(5) Call up your V.H.F. Station when your E.T.A. is about thirty minutes away. At present V.H.F. facilities are not crowded during the monsoon, and an early call may save time if you are off track or require diversion.

If pilots of Beau X's bear all this in mind, they should not be unduly worried by having to fly in monsoon weather.

Back Numbers of Tee Emm?

BACK numbers of issues of TEE EMM can be supplied to make up sets—*provided* we still have them in stock—by writing to The Editor, TEE EMM, Air Ministry, Kingsway, W.C. 2.

If you then want to get your sets bound up all you have to do is to write to The Whitefriars Press, Tonbridge, Kent, sending the copies and enclosing money at the rate of 5*s.* per volume, which sum includes postage. And by the way, this is a personal deal between you and The Whitefriars Press. It's no good asking us to do it for you; we've only made the arrangement. There's even less joy in sending us the money. We just aren't to be trusted to pass it on.

Three and Three-Quarter Years Ago

Carrying on with our plan of publishing each month a selected article from our corresponding issue of three and three-quarter years ago, we print this month the following piece from our issue of August, 1941. A few minor corrections have been made to bring it up to date.

"MARCH HIM IN, FLIGHT SERGEANT!"

FOR every young Pilot Officer there will, sooner or later, arrive the moment when he has to "take Flight Office." Frequently it happens that, owing to an unavoidable absence of his Flight Commander, this moment arrives sooner rather than later—and inevitably much sooner than expected. Life is like that.

At short notice, therefore, Pilot Officer Prune learns from the Flight Sergeant that he proposes to play the *rôle* of Master of Ceremonies at a short interview with a certain Aircraftsman Clott and wishes P.O. Prune to preside. In short, P.O. Prune will have to investigate and deal with a charge under Air Force Law, and possibly weigh off the first delinquent of his service career.

P.O. Prune is the whole Air Force Act.

Are you nervous, P.O. Prune? You are? There is no need to be if you get the following points clear in your mind:

1. Remember, first of all, and throughout the interview, that you are no longer Pilot Officer Prune, one of the lower forms of life: you represent your Flight Commander, who represents the Squadron Commander, who represents the Commanding Officer, and so on right away up and back. You are, in fact, the embodiment of the administration of justice under the Air Force Act, and as such, for the moment very important indeed. So don't lounge in your chair, or speak informally, or have a relinquished cigarette smoking in the tray, or put on a nervous disarming smile, or fidget with pens and pencils, or do anything else not in keeping with the dignity of the high authority you now represent.

2. Prior to having the delinquent in, make certain that you have in front of you:
   (*a*) The man's conduct sheet (F. 121). This, however, should only be referred to after your finding.
   (*b*) The Offence Report (F. 281). Examine this to see that the charge is correctly framed.

3. Have a word with the Flight Sergeant and get an idea of what it's all about. He probably knows more about the charge and the man than you do. But remember, *yours* is the decision, *after* investigation: don't let even a Flight Sergeant put ideas

into your head. This is also a good opportunity for finding out, if you do not already know, what powers have been delegated to you, as a subordinate commander, and what offences you are allowed to deal with under K.R. 1129 and 1141 (2).

4. Have the accused and escort marched in together with all witnesses, who must hear the charge read out.

5. Read out the charge, and make certain, by asking him, that the man in front of you *is* the man charged on paper. No. 12345 A/C Clott, W. G., may cause you a spot of bother if he virtuously points out, after the ball is over, that you have awarded punishment to a certain No. 12854 A/C Clatt, W. C., an unknown criminal with whom he personally wouldn't associate.

6. Order the Flight Sergeant to march out all witnesses except the first. They should not actually hear each other's evidence—no matter how closely they've probably discussed it beforehand.

7. Hear the first witness's evidence, ask accused if he wants to ask questions, ask any further questions yourself and have the witness marched out.

8. Repeat with the other witnesses.

9. Beware of making up your mind about things at this stage. You haven't yet had the other side of the picture. So ask accused if he wishes to make a statement.

10. Then ask him if he wishes to call any witnesses in his defence. If so, have them in one at a time and let him examine them.

11. Make your decision, after reference to the conduct sheet, and either—

(*a*) Dismiss the case.

(*b*) Award punishment within your powers (see 3 above), remembering that any award involving loss of pay *must* be prefaced by asking the accused if he is willing to accept your punishment or elects to be tried by Court Martial.

(*c*) Remand the case for the Commanding Officer, if you are doubtful about dealing with it yourself. (If you *are* going to do this, be careful not to tell the man off. He may later virtuously point out to the C.O. that you have already admonished him and that therefore he cannot be further punished !) In all serious charges you should remand ; and it is better to do so if you have any doubt—at any rate at the early stages of your administrative experience. As a junior officer you may get into trouble by dealing with an offender who should have been dealt with by his Commanding Officer—because the case cannot be re-opened. But beware of becoming a " post office," simply passing on everything that comes in, happy in the knowledge that there is a higher authority behind you. First of all it's an evasion of responsibility which it is your duty as an officer to accept ; and secondly, it's one way of killing the initiative which it is your duty as an officer to develop.

And finally, Prune, read Sections 24 and 26 of A.P. 837—the Manual of Administration ; also Appendix II, where you will see what errors you should avoid.

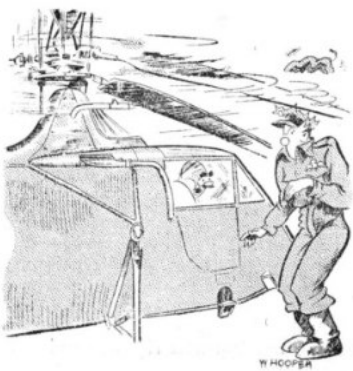
Don't Get Helicopped!

HELICOPTERS are now being used in the service—not many at present, but more are coming along—and we think you should know something about them. We don't mean know how to drive them—there are special Training Flights for that—but know how not to get " copped " by them, when you are in the rôle of an innocent but curious by-stander. For they are not quite such simple things as they look and when on the ground can be very dangerous to people in the vicinity who are not aware of their funny little ways. So here's some gen about them, which may prevent you helicopping it unawares.

First, note the main rotor, that is the big propeller affair on top. This rotates in a horizontal plane about the vertical axis of the aircraft, but the height of the blade tips above the ground varies depending on the revs. and also of course on the slope of the ground on which the aircraft is standing. The average height is about five to six feet—and that is also, unfortunately, about the height of most men. You should, therefore, at once get rid of any assumption that because the rotor is *above* the aircraft it is also above *you*. There is no future in approaching a helicopter within the radius of the main rotor, when the engine is running, *even if the rotor is not in motion*. (There's even less future, of course, in doing it when the rotor *is* in motion.) For though the helicopter rotor may be at rest when the engine is running, it can be set going in a second when the pilot engages the clutch, and the pilot *has not got* a 360° range of vision.

Next note the tail rotor, that is the small propeller on the starboard side of the tail. This rotates vertically and is in line with the fore and aft axis of the aircraft. The tips of this, too, are about five feet from the ground, or nicely at chest height; and this also can be at rest when the engine is running, but liable to be started up any minute by the pilot who can't see behind him. Moreover, being smaller it is not so easily seen (but just as easily felt), and, in addition, it is situated in what would normally be a safe area with more conventional aircraft.

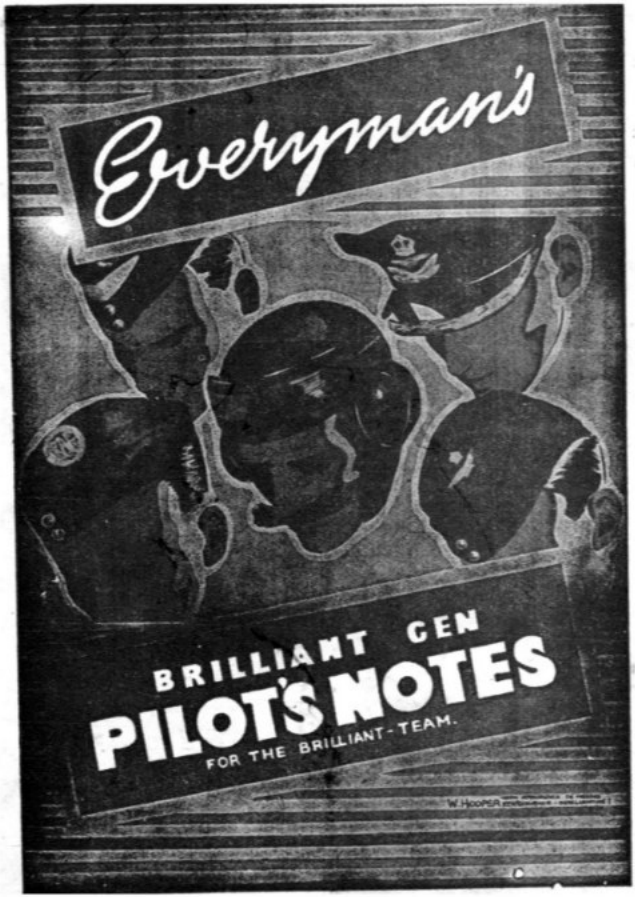
To sum up, therefore, treat helicopters with respect, and don't think they can be approached in the same way as a Lancaster or even a Moth—however anxious you may be to get up close and see how the darn thing works.



He thought Astro was something you took for a headache.

TEE EMM is an O.U.O. publication, which means it is for Official Use Only. And this means that those not entitled to see it are *not* to see it. It is primarily a Training Memorandum for air-crews, instructors and all those in the Air Force connected with these jobs. It is, in short, a Service Training Memorandum written *for* the Service and issued *by* the Service in the person of the Air Member for Training.

(3801). 1422. Wt.8232/N.974. 32,500. 5/45. W.P. Ltd. Gp. 454.


Everyman's
BRILLIANT GEN
PILOT'S NOTES
FOR THE BRILLIANT-TEAM.
W. HOOPER