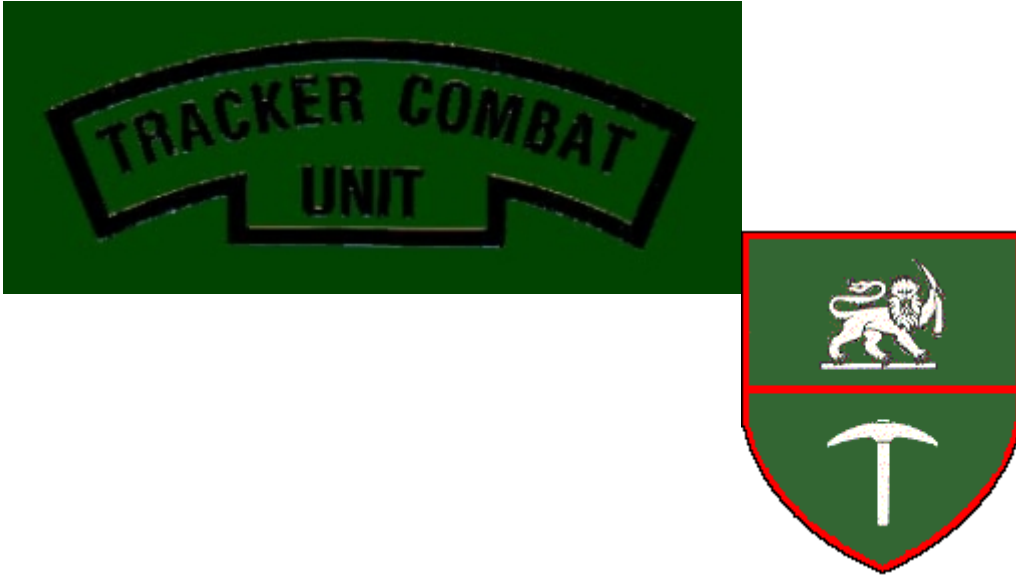


Rhodesian Combat Tracking



5 POINTS FOR SUCCESSFUL COMBAT TRACKING

1. Don't move so quickly that you overlook telltale signs.
2. Learn to use your sense of smell as well as your sight and hearing.
3. Don't just observe the tracks: interpret what they mean.
4. Get to know your enemy: study the terrorists' operating procedures, habits and equipment.
5. Be persistent: don't lose the will to win when you lose the spoor/trail. Try to find it again.

THE RULES OF TRACKING

Tracker sets the pace.

Record the start point.

Always know your position.

Confirm on aerial spoor.

Kee in visual contact.

Identify the correct tracks.

Never walk on ground spoor.

Get into the quarry's mind.

NEVER GO BEYOND THE LAST KNOWN SPOOR

COMBAT TRACKING TECHNIQUES:

HOW TO TRACK YOUR ENEMY.

BY JOHN EARLY (CAPTAIN)

Sweat stings tired, dust-filled eyes. Adrenaline throbs like an electric river through your body as you search the near by bush. Every nerve feels for the enemy you know is there — somewhere.

Your unit has been ambushed and the guerrillas have broken contact and fled. At least, that's what you think. If your unit is lucky or well-trained or both, you may have few or no casualties and your blood is up to get the bastards.

The problem: how to track your enemy.

Today's mercenary soldier is usually the product of NATO-styled, technologically-oriented armies and as such has had little experience in tracking people. He is usually a foreigner, brought in to stabilize a desperate situation or to bail out some well-heeled bigwig, and is operating on strange terrain, under difficult conditions with marginal troops.

Perhaps you should think back to a few months earlier when you first began this operation and let's assume you are operating on a fairly long-term contract.

Your first concern is the terrain. You can't track in it, if you don't have a rudimentary knowledge of the Lay of the land. Prior to operating in the area, you should, ideally, have spent a few days acclimating your troops, if they are not local boys. During this period, thorough map studies with available maps, air photos, and even touring guides can be helpful. Extract detailed briefings from the local police, military officials, and population. Talk to local farmers, natives, anyone who has been in the area in which you will be operating.

Your equipment should be organized during this period as well, and any remedial training necessary conducted. Pay special attention to camouflage. Secure all your gear, discard the inessentials, and inspect the troops for the same. Carry food, water, and ammunition and go as light as possible. Some trackers dress like the enemy and use captured weapons. This is helpful if you are tracking outside your own country and into enemy-dominated countries.

Exercise caution. A large number of people, dressed in the correct uniform, have been shot in error by their own troops. Weigh the pros and cons carefully. Also try to learn as much about native fieldcraft as possible. How do they use the terrain to survive? Where do they get food and water, and what do they use for expedient tools and weapons?

Study all information on local weather. It will have a definite effect on your operations and hence your tracking. By enlisting the natives, if possible, to teach you about local vegetation, you will gain excellent survival information which may help you make decisions as to enemy movements. If he is far from his supply bases, he will attempt to live off the land to sustain or even expand his operations, especially if native assistance is denied him.

How ever, do not assume that the enemy is an excellent bushman just because he is indigenous to that continent. In Rhodesia, Angola, and Mozambique, terrorists have been found wandering, lost and starving, because they were also strangers.

My tracking instructor in Selous Scouts once related that he could track and live most anywhere but that his effectiveness would be greatly reduced outside his native area and consequently his confidence in his ability would suffer. And he was considered to be the best tracker in Rhodesia. If you know the ground and are comfortable in it, you already have a 30 percent edge on the enemy.

Also, during your terrain study, note native customs and attempt to learn some of the language and folklore. This takes time and effort and on short-term jobs will be nearly impossible, but if you have the time, it will pay big dividends. It may give you the necessary edge to come out



of the next contact as the “champ” rather than the “chump.”

Glean as much information as possible about animal wildlife in the area, It will be invaluable in tracking and if your next supply column is ambushed or the quartermaster sells it and retires to the south of France you can still feed your troops.

KNOW THE ENEMY

Secondly, know your enemy. The better you understand him, his motives, aspirations, traits, habits, tactics, and attitudes, the greater your tactical edge on him. As a result, you will be able to run him to ground sooner. Once you understand the enemy, your task will become much easier.

If possible, keep notes on tactics employed against your unit and other police and para-military groups. Look for patterns of the enemy in general and specific commanders in particular. Watch his standard operating procedures and record his responses to your tactics. Intelligence is usually extremely limited to a mercenary, so be your own S-2. Absorb every piece of information available to you.

Now that you have some idea as to the enemy and the situation, you may investigate the feasibility of using native trackers. Seek out local authorities as to who the headman, local chief or *Kraal* head is and his location. Then with one of the officials, who is known to the chief, approach him for the assistance of the most reliable, efficient trackers in the area. You may have difficulty since he may be in sympathy with the guerrillas or just plain scared. Allay his fears if possible, and be prepared to offer top wages and protection for the trackers and their families. This is the only way to assure some semblance of loyalty. Investigate any native male of military age who might be seeking revenge against the terrorists. Use this to your advantage.

When dealing with native troops, be firm, fair, and honest. Be friendly but not familiar and treat them with respect and accord them the dignity due their station in the tribe; Treat them well but not lavishly. Make sure they understand exactly what is expected of them and guide them adequately in the field. Never assume anything and always be decisive. Never promise them anything unless you can deliver immediately and never lie to them. In many situations only mutual trust and respect will keep them loyal to you.

Once you have employed your trackers, you may be puzzled as to how to gauge their effectiveness. Probably the most positive way is to see how often they track into contact. If they are constantly being fired on first, then your troops are only marginal types. Good trackers will be able to tell how far ahead the enemy is and alert you to this fact so you can request air cover or more follow-up troops to reinforce your patrol.

One of the premier trackers in Rhodesia, an African NCO in Selous Scouts, has personally tracked into and killed 80-plus terrorists since the war began. What is even more remarkable and clearly demonstrates his prowess is the fact that he has tracked and located twice that number of terrorists without the enemy realizing his presence until the follow-up troops attacked. He is so valuable that he is now responsible for training tracking personnel for the entire Rhodesian Army and is only called out when specific terrorist commanders are suspected of operating in the area.

This article has been written to help you if you wish to become a better tracker or to know enough to properly employ and command tracking teams. This knowledge will not make you a tracker: Only practice, practice, and more practice, under expert supervision, will do that.

HOW TO TRACK

Now, for the most important aspect: How to track. First, psychologically and physically prepare for the hunt. You should be in good physical condition with excellent reserves of stamina, alert, reasonably well fed and above all confident in yourself and your men. You may be forced to travel for days under adverse conditions, without food and with little water, at a fast pace and under tremendous mental stress. Tracking requires intense concentration, stamina and an eye for detail.

Secondly, you must know what to look for when reading spoor (tracks). When you begin tracking, try spooring large groups in easy terrain for short distances. Usually soft ground with knee-high grass is best. Send out three or four people with instructions to walk for about five to 10 minutes, depending on the bush growth, and then rest until you find them. Your attention span at first will be short and you will tend to discourage quickly. You will lose the spoor often, but don't worry. No one is a born bushman. Be patient and concentrate on the spoor. As you become more aware of what to look for, the legs of spoor can be lengthened until your spoor layers are given a 30-minute head start. This can be extended to hours until they are laying spoor in the morning and you are tracking later in the day.

As you are tracking, look for evidence (track signs) of disturbed grass; bent blades will reveal the direction of travel. The top of the grass will point in the direction the person is walking. If the enemy has passed through after sunrise the dew will be disturbed and a faint darkened area will reveal his trail. Watch for broken spider webs or cobwebs. When examining spoor always keep your head slightly up and look 15 to 20 yards ahead of you. It will enable you to see the spoor better, determine the direction of movement, and keep alert for likely ambush areas. If the terrorist knows or suspects he is being followed, he will try to set you up.

Be alert, patient, and careful. Watch for rocks that have been overturned. The dark side will be up or you will see the impression on the ground where it once rested. Although mid-day heat will dry the rock quickly, it tells you the terrorist is only hours ahead of you. If you find it in the morning, then he has been moving prior to sunrise. The darker and wetter the rock, the closer your quarry.

Much of tracking means noting what is out of context in nature and realizing the cause. Move from sign to sign and always be sure of your last confirmed sign before you move on to the next. There are, of course, the obvious: footprints in the mud near streams and water holes and along sandy rivers; leaves on plants that have been broken, knocked off, or turned so that the light underside contrasts with the surroundings; scuffed tree bark or mud scraped from passing boots and the impression of rifle butts being used as crutches or canes up steep slopes. Of course, there is the old favorite, blood on the vegetation and trail.

Watch for discarded ration packages, food tins, and even dropped or discarded documents. U.S. troops in Vietnam were easily tracked, not by recently cut jungle foliage but by their inevitable trail of Kool-Aid packages. Once you have identified the spoor, try to identify the type of foot gear. Often different guerrilla groups wear different type boots. Terrorists in Rhodesia have been killed and captured carrying two or three types of shoes and wearing two or three shirts and pants, at the same time! Make sure the print is not one of your own people or security forces and keep a record of the different type prints you encounter. Plaster impressions, drawings, photos or even a copy of the soles themselves should be on record with local intelligence people. The Rhodesians and South Africans make copies of all terrorist footwear and distribute these drawings to the local population. Village police, hunters, and farmers walking in the bush have often discovered the trail of terrorist gangs who have crossed from Zambia or Mozambique and have alerted the security forces.

The depth and space of the tracks will also tell you something about your foe. Women take smaller steps, as do heavily laden men. People running will leave more space between tracks and men walking in each other's tracks will make deeper impressions. Also, they will cause the edges of the tracks to be less distinct. Drag marks could indicate wounded. Once you have identified your particular track, follow it even if the group splits. Sometimes guerrillas will split up or bombshell, until you are left following one set of tracks.

TRACKING TEAMS

If you have the personnel, you can assign tracking teams to each set of tracks. If not, pick one and run him to ground, then pick another. Try to stay with the main body, if possible. You may get lucky and nail the commander or political officer or you may end up following the spoor to the RV point where you can ambush the entire gang.

Sunlight will also have some effect on reading spoor. If you are tracking into the sun and are experiencing difficulty in seeing the sign, look back over your shoulder every few yards to confirm your spoor. Never walk on your spoor and caution the follow-up troops behind you also to walk to one side of the tracks.

If you lose the spoor, it is imperative that you go back to the last positive sign, confirm it, and then begin a search pattern to relocate the tracks. Watch for the absence of insects or wildlife. Most wild creatures are shy of man and will seek shelter if he has been in the area. Birds are great indicators of men as are baboon, impala, and many types of deer. Listen for animals snorting or running and note the direction. Something is there.

If you lose the trail, there are a number of search patterns used to relocate spoor. The most common are the cross grain, the box search and the 360-degree sweep. Go back to the last positive spoor and mark it. Then look up to about 25 to 30 meters in front of you and sweep from center to left out about to 45 degrees and then sweep back to center. Repeat the process to the right, each time coming back to your feet and the last confirmed spoor. Look carefully and slowly and most times you will pick up the spoor again.

If not, brief the troop commander to alert his men to the fact that your trackers will be circling to the front and flanks and possibly to the rear.

CROSS GRAIN METHOD

To use the cross grain method the tracker moves laterally from the spoor either left or right about 100 meters and then doubles back toward his original line of march. Each time he turns, the tracker should advance about 50 to 75 meters forward before doubling back. (See the accompanying diagram.) If you have moved approximately 500 meters ahead of the last spoor and still cannot find the tracks, resort to the 360-degree method, gradually expanding your circle until you find your spoor.

360-DEGREE METHOD

In the 360-degree method, the tracker makes ever increasing circles from his last confirmed tracks back to his point of origin. When you lose spoor, be patient and keep looking. Some trackers have been known to circle as far as five kilometers from the last confirmed spoor until they cut the trail of their prey. (See accompanying diagram.)

BOX METHOD

Sometimes used is the box method of search in which each half of the area is boxed off and examined on the two sides of the spoor. This time-consuming method is confusing and is not frequently used today. (See accompanying diagram.)

Another important point is to determine the age of the spoor and the number of personnel involved. To determine age, note the way in which vegetation is disturbed. Grass blades will remain green for about a day after being broken. Prints in mud will usually take about an hour to fill with water, depending on the amount of moisture in the earth. Disturbed dew drops on grass and plants will indicate passage of something within the last few hours. Dew usually stays on for about four hours after sunrise. Overturned rocks take a couple of hours to dry in direct sun. Cobwebs and spider webs usually take about an hour to be replaced by the insects.

Rain can also be used to your advantage to indicate age of spoor. If you know the last time it rained in the area, you can tell how old tracks are. Animal prints superimposed on the spoor will tell you that the spoor was made prior to nightfall, since most animals move at night. The reverse is applicable. If you see the spoor on the animal prints, the spoor was made sometime after sunrise.

Broken twigs and vines are also good gauges of time since it requires about 10 hours for the pulp inside to begin to turn brown. If you discover a resting area, check the campfire's heat. Look for cigarette butts, ration tins, documents, letters, or diaries. If your terrorist is communist oriented, he will usually be carrying a diary. Look for human feces near the camp. Interrogate all the locals you meet. They may be hiding the guerrillas, feeding them, or know where they are camped. The trail itself can be used to tell age. If it is erratic or circuitous, your enemy may be walking in the dark.

U.S. RANGER AND AFRICAN COUNTS

The second most important factor is the number of people you are tracking. There are two methods I have seen used. The first is taught to Special Forces and Ranger graduates and is used by the U.S. Army; the other is popular with Rhodesian and South African Defense Forces. In the U.S. method, take the length of an average pace and measure it on the ground next to the tracks. Now lay out a space about 18 inches wide across the tracks so that the prints are enclosed in a box that is 36 inches by 18 inches. Count all the whole and partial prints in this box and then divide by a constant of two. If you count 10 prints inside the box, your answer is five people.

The Rhodesian method uses the length of the FN rifle or G-3 rifle and the same 18 inch (45cm) width. Using this method, count only the *whole* prints you see inside the box. If the answer is four or less, that is what you report to the team leader or headquarters. If the answer is five prints, then add two to the number and report that number. If you read six, add two and report eight. This is a safety factor that seems to be right most of the time.

Should you discover a resting place, count the places on the ground and no matter what the number, add two and report that number. Should you be operating more conventionally, call in periodic tracking reports to your headquarters. These can be plotted on a map and a general pattern determined. It will also allow different terrorist groups to be plotted together to determine if this is some sort of coordinated action. It will also establish what routes are being used to funnel enemy troops into and out of the area.

A sample of a tracking report might follow the following format. Use the code word NDAT. First give your location using the standard military grid system. The "N" is the *number* you believe to be in the enemy unit as determined by your print count. "D" is the general direction of spoor expressed by magnetic bearing. "A" is age of spoor, if possible. And "T" equals type of spoor followed, boots, shoes, bare feet, etc.

TRACKING TEAMS

Next, let's discuss tracking team assignments and duties. First, the team leader: He is responsible for the control of the team and all follow-up troops until the time of contact, when control of the follow-up units reverts to the ground commander. Once the trackers have found the enemy, conventional tactics can be used to close with and kill him. The team leader relays information to the CO follow-up troops and the next higher headquarters. He is responsible for briefing the troops in the team operation and what duties he will expect of the ground follow-up unit. On contact, he extracts the team, if possible, and allows the infantry to engage the enemy. Trackers are too valuable to risk in a fire fight and should not engage unless there is a serious manpower shortage. He is also the tail gunner, if the team is working alone.

The tracker: He is responsible for reading the spoor and interpreting it to the team leader.

The flankers: These two men, who are also trained trackers, are responsible for the forward and flank security of the tracker. As the tracker becomes fatigued, they rotate duties with him so that all the trackers remain fresh and alert. The team leader does not pull tracker or flanker duty. The flanker's function is most important; he will probably see and engage the enemy first. He must be alert and ready for instant action.

Follow-up troops: These men are under the control of the team leader until contact is made or the enemy pointed out to the CO of the follow-up unit. Follow-up troops should be in close proximity to the trackers, although reinforcements can be vehicle or airborne and on call.

RULES

Now for general rules concerning tracking teams:

1. All members of the tracking team should be trained, experienced trackers.
2. Four men seems to be the best number for team size.
3. If possible, never separate a team once formed. Teamwork saves lives and gets results.
4. Get the trackers on the spoor as soon as possible.
5. Once the tracking team commander is on the ground, be he private, lance corporal or general, he is in charge. More tracking scenes have been blown by operations-room signal officers and helicopter pilots with Napoleon complexes than I can count. Until contact with the enemy is made or spoor is lost, the team leader is *boss*! If this rule cannot be adhered to, have no qualms about packing up and going home.
6. Rotate tracker and flanker often. Tracking requires exacting concentration and the pressure is terrific. The team leader should watch for these signs always.
7. When operating, use hand signals at all times. If you must confer, take cover and whisper. You can devise your own signals but use the same ones consistently.
8. Rest your teams as often as possible. Once on the spoor, they may be forced to travel for many days. Tired people make mistakes.
9. If a general pattern is discernible by the intell chaps, you may wish to try to leap-frog to get ahead of the guerrillas. While one team is tracking, have another check a few kilometers ahead for the same spoor. If found, up-lift your team and continue the trail there. Use this technique carefully and don't try to hurry.
10. If you have the teams, you can saturate the area being tracked.

Just about all standard infantry tactics apply to tracking teams with the exception of the crossing of obstacles such as rivers, streams, roads, trails, or rail lines. Instead of the flankers crossing to recon the other side and then calling the rest of the unit over, the team, after carefully observing the far side, crosses together under the cover of the follow-up troops. This is done to keep any spoor on the other side intact and undisturbed. The risk imposed upon the team by use of this tactic is less important than staying on the tracks of what could prove to be an important guerrilla leader.

FORMATIONS

The standard tracking formation is Y shaped, with the flankers forming the open legs of the Y and the tracker at the junction, with the team leader directly behind him. The team leader remains about five meters behind the tracker, and the flankers remain forward of the tracker and to the side as much as terrain and vegetation will allow. (See diagram 4.) Usually the follow-up troops will be in file behind the team; however, 4 Battalion, The Rhodesia Regiment, has developed a unique formation that seems to work well in African bush. (See diagram 5.)

Once contact is imminent, troops can move to a skirmish line behind and to the flanks of the tracking team. This allows the troops to move forward at once and leaves the trackers a gap to fall back through. If you are short of men, the trackers can maintain their place in the sweep line and reinforce the infantry (the trackers seem to prefer this idea so they can get a few shots off as well).

I have also seen an “off-set” formation used as well. On contact, the troops swing out and up on the flanks until you have a complete sweep line and then all move forward together. (See diagram 6.)

ANTI-TRACKING

The techniques for anti-tracking are as varied as your imagination. You may be the one being tracked some day, so give some thought to covering your trail. Here are some possibilities:

1. Wear the same boots as the enemy, if you are operating in his territory. If he goes barefoot you could be in for some tough going.
2. Use animals or cattle to cover your tracks.
3. Move in the rain if possible.
4. Use streams and rivers, roads and railways to cover your spoor.
5. Walk on rocky or hard ground.
6. Move through villages to get lost in the tracks. (Note: If you are desperate enough to try to penetrate a village, do so very carefully at night and only as a last resort.)
7. Split up or bombshell and circle back and RV (rendezvous).
8. Brush out your tracks with bushes, hats, or neck scarves.
9. If dogs are after you, try using CS or tear gas powder or pepper laced with ammonia on your tracks.
10. If you can, booby trap and ambush your trail.

SCOUT DOG TEAMS

Finally, we come to an aspect of tracking that has been used extensively by NATO-style armies in Europe and Asia: scout dog teams.

If you have the use of scout dog teams, by all means employ them. They are there to support the ground troops in locating the enemy and to provide silent warning. They may also be used as listening and observation posts. Once you know you are going to use dogs, have them assigned to the unit as far ahead of the mission as possible. This gives the team and the dogs time to adjust to each other. The handler should let each member of the patrol touch the dog to eliminate fears the men might have. Scout dogs have limitations which should be borne in mind. Dogs have acute senses of smell, good hearing, and are attracted quickly to movement. Dogs are subject to periodic retraining and are as sensitive to the elements as humans.

The best position for the dog team is directly in front of the patrol. Wind conditions may require that the team move to windward to take advantage of the dog's sense of smell. Some dogs can, depending on weather and wind, sense the enemy 200 meters away.

The dog can be used to locate sentries and determine the extent of positions and emplacements and may assist the patrol leader in setting up his men without being detected by the enemy.

The following are some general rules for dog teams:

1. If the handler is killed, leave the dog with him and report it to your HQ.
2. If the handler is a casualty, try to lure the dog away so you can treat him. If you must evacuate one, send the other as well.
3. Treat the team as one of the unit. Support them and keep the handler informed of all tactical moves.
4. Let the handler select the dog's position in the line of march.

5. Seek the handler's advice in employing the team.
6. Do not expect the team to perform miracles and do not relax your alertness because they are with you.
7. Do not feed or play with the dog.

Although the information in this article *will not* make you an "ace" tracker, it will give you a better awareness of tracking and the tactics employed by tracking teams and the Selous Scouts.

The only way to become a competent, reliable tracker is to use the method of the natives: practice, practice, practice. It is a skill that can stand you in good stead on your next operation, enhance your combat effectiveness, and perhaps save your life.

(END)

Tracking was among the skills that Capt. John Early, SOF contributing editor for military affairs, learned in his 12 years with the U.S. Army and three years with the Rhodesian air force and army. In the Army, Early spent 4½ years in Vietnam as a Special Forces NCO and officer with the 5th and 10th SFGA. His Rhodesian tour included service with the elite Selous Scouts.

TRACKING AND COUNTERTRACKING



USE OF LOCALS FOR GUIDES AND COMMANDO/SCOUT TRACKERS

With common sense and a degree of experience, you can track terrorists. You must develop the following traits and qualities to be successful and to lead your stick to contact.

- Be patient and steady.
- Be able to move slowly and quietly, yet steadily, while detecting and interpreting signs.
- Avoid fast movement that may cause you to overlook signs, lose the spoor, or blunder into a terrorist unit that is counter tracking.

- Be persistent and have the skill and desire to continue the mission even though signs are scarce or bad weather or terrain is destroying the spoor.
- Be determined and persistent when trying to find a spoor you have lost.
- Be observant and try to see things that are not obvious at first glance.
- Use your sense of smell and hearing to supplement your sight and intuition.
- Develop a feel for things that do not look right. It may help you regain a lost trail or discover additional spoor.
- Know the terrorist, his habits, equipment, and capability.
- Trust your stick to back you up and your other troops to protect you.

TECHNIQUES

The ability to track a terrorist after he has broken contact also helps you regain contact with him, which is more important in the African bush than in any other theater of war.

Visual tracking is following the paths of men or animals by the signs they leave, primarily on the ground or vegetation. Scent tracking is following men or animals by their smell.

Tracking is a precise art. You need a lot of practice to achieve and maintain a high level of tracking skill. You should be familiar with the general techniques of tracking to enable you to detect the presence of a hidden enemy and to follow him, to find and avoid mines or booby traps, and to give early warning of ambush.

Perhaps you should think back to when you first began this operation. Let's assume you are operating on a fairly long-term contract.

Your first concern is the terrain. You can't track in it if you don't have a rudimentary knowledge of the lay of the land. Prior to operating in the area, you should ideally have spent a few days acclimating your troops, if they are not local civilians. During this period, thorough study of available maps, air photos, and even tour guides can be helpful. Extract detailed briefings from the local police, military officials, and population. Talk to local farmers, natives, police units, anyone who has been in the area in which you will be operating.

Your equipment should be organized during this period as well and any remedial training conducted. Pay special attention to camouflage. Secure all your gear, discard inessentials, and inspect the troops for the same. Carry food, water, and ammunition and go as light as possible. Some trackers dress like the terrorists and use captured weapons. This is helpful if you are tracking outside your own country into enemy-dominated countries.

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However, do not assume that the enemy is an excellent bushman just because he is indigenous to that continent. In Rhodesia, Angola, and Mozambique, terrorists have been found wandering, lost and starving, because they were also strangers. If you know the ground and are comfortable in it, you already have a 30-percent edge on the enemy.

Also, during your terrain study, note native customs and attempt to learn some of the language and folklore. This takes time and effort and on short-term jobs will be nearly impossible, but if you have the time, it will pay big dividends. It may give you the necessary edge to come out of the next contact standing up instead of lying down.

Learn as much information as possible about wildlife in the area. It will be invaluable in tracking.

When tracking a terrorist, you should build a picture of him in your mind. Ask yourself, "How many persons am I following? How well are they trained? How are they equipped? Are they healthy? How is their morale? Do they know they are being followed?" You should ask questions of the survivors of a terrorist attack and find out as much about the leader as possible and how he thinks.

Know the terrorist. The better you understand him, his motives, aspirations, traits, habits, tactics, and attitudes, the greater your tactical edge. As a result, you will be able to run him to ground sooner. Once you understand the terrorist, your task will become much easier.

If possible, keep notes on tactics employed against your stick and other police and paramilitary groups. Look for patterns of the terrorist group in general and of specific commanders in particular. Watch his standard operating procedures and record his responses to your tactics. Intelligence is usually extremely limited to a mercenary, so be your own second in charge (2 IC). Absorb every piece of information available to you.

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Now for the most important aspect: How to track. First, psychologically and physically prepare for the hunt. You should be in good physical condition with excellent reserves of stamina, alert, reasonably well-fed, and above all confident in yourself and your men. You may be forced to travel for days under adverse conditions, without food and with little water, at a fast pace, and under tremendous mental stress. Tracking requires intense concentration, stamina, and an eye for detail.

Secondly, you must know what to look for when reading spoor (tracks). When you begin tracking, try spooring large groups in easy terrain for short distances. Usually soft ground with knee-high grass is best. Send out three or four people with instructions to walk for about five

to ten minutes, depending on the bush growth, and then track until you find them. Your attention span at first will be short and you will tend to become discouraged quickly. You will lose the spoor often, but don't worry. No one is a born bushman. Be patient and concentrate on the spoor. As you become more aware of what to look for, the legs of spoor can be lengthened until spoor layers are given a thirty-minute head start. This can be extended to hours, until they are laying spoor in the morning and you are tracking later in the day.

As you are tracking, look for evidence of disturbed grass; bent blades will reveal the direction of travel. The top of the grass will point in the direction the person is walking. If the enemy has passed through after sunrise, the dew will be disturbed and a faint darkened area will reveal his trail. Watch for broken spider webs or cobwebs. When examining spoor always keep your head slightly up and look fifteen to twenty yards ahead of you. It will enable you to see the spoor better, determine the direction of movement, and keep alert for likely ambush areas. If the terrorist knows or suspects he is being followed, he will try to set you up.

Be alert, patient, and careful. Watch for rocks that have been overturned. The dark side will be up or you will see the impression on the ground where it once rested. Although midday heat will dry the rock quickly, it tells you the terrorist is only hours ahead of you. If you find it in the morning, then he has been moving prior to sunrise. The darker and wetter the rock, the closer your quarry.

Much of tracking means noting what is out of context in nature and realizing the cause. Move from sign to sign and always be sure of your last confirmed sign before you move on to the next. There are, of course, the obvious: **footprints in the mud** near streams and water holes and along sandy rivers; leaves on plants that have been broken, knocked off, or turned so that the light underside contrasts with the surroundings; scuffed tree bark or mud scraped from passing boots and the impression of rifle butts being used as crutches or canes up steep slopes. Of course, there is the old favorite, blood on the trail.

Watch for discarded ration packages, food tins, and even dropped or discarded documents. U.S. troops in Vietnam were easily tracked, not by recently cut jungle foliage but by their inevitable trail of Kool-Aid packages and junk. Once you have identified the spoor, try to identify the type of footgear. Often different guerrilla groups wear different types of boots. Terrorists in Africa have been killed and captured carrying two or three types of shoes and wearing two or three shirts and pants at the same time! Make sure the print is not one of your own people or a regular army unit, and keep a record of the different types of prints you encounter. Plaster impressions, drawings, photos or even a copy of the soles themselves should be on record with local intelligence people. The military intelligence unit makes copies of all terrorist footwear and distributes these drawings to local population. Village police, hunters, and farmers walking in the bush have often discovered the trails of terrorist gangs who have crossed from one border to another and have alerted the security forces.

The depth and space of the tracks will also tell you something about your foe. Women take smaller steps, as do heavily laden men. People running will leave more space between tracks, and men walking in each other's tracks will make deeper impressions. Also, they will cause the edges of the tracks to be less distinct. Drag marks could indicate wounded. Once you have identified your particular track, follow it even if the group splits. Sometimes guerrillas will split up or bombshell until you are left following one set of tracks.

Tracking Teams

If you have the personnel, you can assign tracking teams to each terrorist's tracks. If not, pick one and run him to ground, then pick another. Try to stay with the main body, if possible. You may get lucky and nail the commander or political officer or you may end up following the spoor to the RV point where you can ambush the entire gang.

Sunlight will also have some effect on reading spoor. If you are tracking into the sun and are experiencing difficulty in seeing the sign, look back over your shoulder every few yards to confirm your spoor. Never walk on the spoor and caution the follow-up troops behind you to also walk to one side of the tracks.

If you lose the spoor, it is imperative that you go back to the last positive sign, confirm it, and then begin a search pattern to relocate the tracks. Watch for the absence of insects or wildlife. Most wild creatures are shy of man and will seek shelter if he has been in the area. Birds are great indicators of men, as are baboon, impala, and many types of gazelle. Listen for animals snorting or running and note the direction. Something is there.

If you lose the trail, there are a number of search patterns used to relocate spoor. The most common are the cross-grain, the box search, and the 360-degree sweep. Go back to the last positive spoor and mark it. Then look up to about twenty-five to thirty meters in front of you and sweep from the center to the left out about to 45 degrees and then sweep back to center. Repeat the process to the right, each time coming back to your feet and the last confirmed spoor. Look carefully and slowly and most times you will pick up the spoor again. If not, brief the troop commander to alert his men that your trackers will be circling to the front and flanks and possibly to the rear.

Team Duties

Next, let's discuss tracking team assignments and duties. First, the stick leader. He is responsible for the control of the team and all follow-up troops until the time of contact, when control of the follow-up units reverts to the ground commander. Once the trackers have found the terrorist group, conventional tactics can be used to close with and kill them. The stick leader relays information to the commando unit follow-up troops and the next higher headquarters. He is responsible for briefing the troops in the team operation and what duties he will expect of the ground follow-up unit. On contact, he extracts the tracking team, if possible, and allows the infantry to engage the terrorist group. Trackers are too valuable to risk in a firefight and should not engage unless there is a serious manpower shortage. He is also the tail trooper, if the team is working alone.

The tracker. He is responsible for reading the spoor and interpreting it to the stick leader.

The flankers. These two troopers, who are also trained trackers, are responsible for the forward and flank security of the tracker. As the tracker becomes fatigued, they rotate duties with him so that all the trackers remain fresh and alert. The stick leader does not pull tracker or flanker duty. The flanker's function is most important; he will probably see and engage the enemy first. He must be alert and ready for instant action.

Follow-up troops. These troopers are under the control of the stick leader until contact is made or the terrorists pointed out to the commander of the follow-up unit. Follow-up troops should be in close proximity to the trackers, although reinforcements can be vehicles or airborne and on call.

Generally just about all standard infantry tactics apply to tracking sticks with the exception of crossing obstacles such as rivers, streams, roads, trails, or rail lines. Instead of the flankers crossing to recon the other side and then calling the rest of the unit over, the stick, after carefully observing the far side, crosses together under the cover of the follow-up troops. This is done to keep any spoor on the other side intact and undisturbed. The risk imposed upon the stick by use of this tactic is less important than staying on the tracks of what could prove to be an important terrorist leader.

Formations

The standard tracking formation is V-shaped, with the flankers forming the open legs of the V and the tracker at the junction, with the stick leader directly behind him. The stick leader remains about five meters behind the tracker, and the flankers remain forward of the tracker and to the side as much as terrain and vegetation will allow.

Spoor Age

Another important point is to determine the age of the spoor and the number of personnel involved. To determine age, note the way in which vegetation is disturbed. Grass blades will remain green for about a day after being broken. Prints in mud will usually take about an hour to fill with water, depending on the amount of moisture in the earth. Disturbed dew drops on grass and plants will indicate passage of something within the last few hours. Dew usually stays on for about four hours after sunrise. Overturned rocks take a couple of hours to dry in direct sun. Cobwebs and spider webs usually take about an hour to be replaced by the insects.

Rain can also be used to your advantage to indicate age of spoor. If you know the last time it rained in the area, you can tell how old the tracks are. Animal prints superimposed on the spoor will tell you that the spoor was made prior to nightfall, since most animals move at night. The reverse is also applicable; if you see the spoor on the animal prints, the spoor was made sometime after sunrise.

Broken twigs and vines are also good gauges of time since it requires about ten hours for the pulp inside to begin to turn brown. If you discover a resting area, check the campfire's heat. Look for cigarette butts, ration tins, documents, letters, or diaries. If your terrorist is communist—oriented, he will usually be carrying a diary. Look for human feces near the camp. Interrogate all the locals you meet. They may be hiding the terrorists, feeding them, or know where they are camped. The trail itself can be used to tell age. If it is erratic or circuitous, your terrorist may be walking in the dark.

Displacement

Displacement takes place when something is moved from its original position. An example is a footprint in soft, moist ground. The foot of the person that left the print displaced the soil, leaving an indentation in the ground. By studying the print, you can determine many facts. For example, a print that was left by a barefooted person or one with worn or frayed footwear indicates that he may have poor equipment.

Footprints show the following:

1. The direction and rate of movement of the terrorist group.
2. The number of terrorists in the group.
3. Whether or not heavy loads are carried.
4. The sex of the terrorist group.
5. Whether the terrorists know they are being tracked.

If the footprints are deep and the pace is long, the group is moving rapidly. Very long strides and deep prints indicate that the group is running. If the prints are deep, short, and widely spaced, with signs of scuffing or shuffling, a heavy load is probably being carried by the group who left the prints.

You can also determine a terrorist's sex by studying the size and position of the footprints. Women generally tend to be pigeon-toed, while men usually walk with their feet pointed straight ahead or slightly to the outside. Women's prints are usually smaller than men's and their strides are usually shorter.

If the terrorist group knows that it is being followed, it may attempt to hide its tracks. Men walking backward have a short, irregular stride. The prints have an unusually deep toe. The soil will be kicked in the direction of movement.

The last terrorist walking in a group usually leaves the clearest footprints. Therefore, use his prints as the key set. Cut a stick the length of each key print and notch the stick to show the print width at the widest part of the sole. Study the angle of the key prints to determine the direction of march. Look for an identifying mark or feature on the prints, such as a worn or frayed part of the footwear. (Refer to the paragraph about different types of footwear.) If the spoor becomes

vague or obliterated, or if the trail being followed merges with another, use the stick to help identify the key prints. That will help you stay on the trail of the group being followed.

Use the box method to count the number of terrorists in the group. There are two ways to use the box method- the stride as a unit of measure method and the 36-inch box method.

The stride as a unit of measure method is the most accurate of the two. Twenty to twenty-five persons can be counted using this method. Use it when the key prints can be determined. To use this method, identify a key print on a trail and draw a line from its heel across the trail. Then move forward to the key print of the opposite foot and draw a line through its instep. This should form a box with the edges of the trail forming two sides, and the drawn lines forming the other two sides. Next, count every print or partial print inside the box to determine the number of persons. Any person walking normally would have stepped in the box at least one time. Count the key prints as one.

To use the 36-inch box method, mark off a 30- to 36-inch cross-section of a trail, count the prints in the box, then divide by two to determine the number of persons that used the trail. (Your R-4 rifle is 39 inches long and may be used as a measuring device.)

Should you discover a resting place, count the places on the ground and no matter what the number, add two and report that number. Should you be operating more conventionally, call in periodic tracking reports to your commando. These can be plotted on a map and a general pattern determined. It will also allow different terrorist groups to be plotted together to determine if this is some sort of coordinated action. It will also establish what routes are being used to funnel terrorist groups into and out of the country.

A sample of a tracking report might follow the following format. First give your location using the standard military grid system. The "N" is the number you believe to be in the enemy unit as determined by your print count. "D" is the general direction of spoor expressed by magnetic bearing. "A" is age of spoor, if possible, and "T" equals the type of spoor followed, boots, shoes, bare feet, etc.

Footprints are only one example of displacement. Displacement occurs when anything is moved from its original position. Other examples are foliage, moss, vines, sticks, or rocks that are moved from their original places; dew droplets brushed from leaves; stones and sticks that are turned over and show a different color underneath; and grass or other vegetation that is bent or broken in the direction of movement.

Bits of cloth may be torn from a uniform and left on thorns, snags, or the ground, and dirt from boots may make marks on the ground.

Another example of displacement is the movement of wild animals and birds that are flushed from their habitats. You may hear the cries of birds that are excited by strange movements. The movement of tall grass or brush on a windless day indicates that something is moving the vegetation from its original position.

When you clear a trail by either breaking or cutting your way through heavy vegetation, you displace the vegetation. Displacement signs can be made while you stop to rest with heavy loads. The prints made by the equipment you carry can help to identify its type. When loads are set down at a rest halt or campsite, grass and twigs may be crushed. A sleeping man may also flatten the vegetation.

In most areas, there will be insects. Any changes in the normal life of these insects may be a sign that someone has recently passed through the area. Bees that are stirred up, holes that are covered by someone moving over them, or spider webs that are torn down are good clues.

If a person uses a stream to cover his trail, algae and water plants may be displaced in slippery footing or in places where he walks carelessly. Rocks may be displaced from their original position, or turned over to show a lighter or darker color on their opposite side. A person entering or leaving a stream may create slide marks, wet banks, or footprints, or he may scuff bark off roots or sticks. Normally, a person or animal will seek the path of least resistance. Therefore,

when you search a stream for exit signs, look for open places on the banks or other places where it would be easy to leave the stream.

Spoor

A good example of spoor is the mark left by blood from a wound. Bloodstains often will be in the form of drops left by a wounded terrorist. Blood signs are found on the ground and smeared on leaves or twigs.

You can determine the location of a wound on the terrorist being followed by studying the bloodstains. If the blood seems to be dripping steadily, it probably came from a wound on his trunk. A wound in the lungs will deposit bloodstains that are pink, bubbly, and frothy. A bloodstain deposited from a head wound will appear heavy, wet, and slimy, like gelatin. Abdominal wounds often mix blood with digestive juices so that the deposit will have an odor. The spoor will be light in color.

Spoor can also occur when a person walks over grass, stones, and shrubs with muddy boots. Thus, spoor and displacement together may give evidence of movement and indicate the direction taken. Crushed leaves may stain rocky ground that is too hard for footprints.

Roots, stones, and vines may be stained by crushed leaves or berries when walked on. Yellow stains in snow may be urine marks left by personnel in the area.

In some cases, it may be hard to determine the difference between spoor and displacement. Both terms can be applied to some signs. For example, water that has been muddied may indicate recent movement. The mud has been displaced and is staining the water. Stones in streams may be stained by mud from boots. Algae can be displaced from stones in streams and can stain other stones or bark.

Water in footprints in swampy ground may be muddy if the tracks are recent. In time, however, the mud will settle and the water will clear. The clarity of the water can be used to estimate the age of the prints. Normally, the mud will clear in one hour. This will vary with terrain.

Weathering

Weather may either aid or hinder tracking. It affects signs in ways that help determine how old they are, but wind, snow, rain, and sunlight can also obliterate signs completely.

By studying the effects of weather on signs, you can determine the age of the sign. For example, when bloodstains are fresh, they may be bright red. Air and sunlight will change the appearance of blood first to a deep ruby-red color, and then to a dark brown crust when the moisture evaporates. Scuff marks on trees or bushes darken with time. Sap oozes from fresh cuts on trees but hardens when exposed to the air.

Footprints

Footprints are greatly affected by weather. When a foot displaces soft, moist soil to form a print, the moisture holds the edges of the print intact and sharp. As sunlight and air dry the edges of the print, small particles that were held in place by the moisture fall into the print. If particles are just beginning to fall into a print, it is probably fresh. If the edges of the print are dried and crusty, the prints are probably at least an hour old. The effects of weather will vary with the terrain, so this information is furnished as a guide only.

A light rain may round out the edges of a print. Try to remember when the last rain occurred in order to put prints into the proper time frame. A heavy rain may erase all signs.

Wind also affects prints. Besides drying out a print the wind may blow litter, sticks, or leaves into it. Try to remember the wind activity in order to help determine the age of a print. For example, you may think, "It is calm now, but the wind blew hard an hour ago. These prints have litter blown into them, so they must be over an hour old." You must be sure, however, that the litter was blown into the prints, and was not crushed into them when the prints were made.

Trails leaving streams may appear to be weathered by rain because of water running into the footprints from wet clothing or equipment. This is particularly true if a group leaves a stream in a file. From this formation, each person drips water into the prints. A wet trail slowly fading into a dry trail indicates that the trail is fresh.

Wind, Sound, and Odors

Wind affects sounds and odors. If the wind is blowing from the direction of a trail you are following, sounds and odors are carried to you. If the wind is blowing in the same direction as the trail you are following, you must be cautious as the wind will carry your sounds toward the terrorist group. To find the wind direction, drop a handful of dry dirt or grass from shoulder height.

To help you decide where a sound is coming from, cup your hands behind your ears and slowly turn. When the sound is loudest, you are probably facing its origin. When moving, try to keep the wind in your face.

Sun

You must also consider the effects of the sun. It is hard to look or aim directly into the sun. If possible, keep the sun at your back.

Littering

Poorly trained terrorist groups may leave trails of litter as they move. Gum or candy wrappers, ration cans, cigarette butts, remains of fires, or human feces are unmistakable signs of recent movement.

Weather affects litter. Rain may flatten or wash litter away, or turn paper into pulp. Winds may blow litter away from its original location. Ration cans exposed to weather will rust. Rust begins at the exposed edge where the cans were opened, then moves in toward the center. Use your memory to determine the age of litter. The last rain or strong wind can be the basis of a time frame.

Camouflage

If a terrorist group knows that you are tracking them, they will probably use camouflage to conceal their movement and to slow and confuse you. Doing so, however, will slow them down. Walking backward, brushing out trails, and moving over rocky ground or through streams are examples of camouflage that can be used to confuse you.

The terrorist may move on hard surfaced, frequently traveled roads or try to merge with traveling civilians. Examine such routes with extreme care, because a well defined approach that leads to the enemy will probably be mined, ambushed, or covered by snipers.

The terrorist group may try to avoid leaving a trail. Its terrorists may wrap rags around their boots, or wear soft soled shoes to make the edges of their footprints rounder and less distinct. The party may exit a stream in a column or line to reduce the chance of leaving a well defined exit.

If the terrorist group walks backward to leave a confusing trail, the footprints will be deepened at the toe, and the soil will be scuffed or dragged in the direction of movement.

If a trail leads across rocky or hard ground, try to work around that ground to pick up the exit trail. This process works in streams as well. On rocky ground, moss or lichens growing on the stones could be displaced by even the most careful evader. If you lose the trail, return to the last visible sign. From there, head in the direction of the terrorists' movement. Move in ever widening circles until you find some signs to follow.

USE OF INTELLIGENCE

When reporting, do not report your interpretations as facts. Report that you have seen signs of certain things, not that those things actually exist.

Report all information quickly. The term “immediate use intelligence” includes information of the terrorist that can be put to use at once to gain surprise, to keep the terrorist off balance, or to keep him from escaping an area. A commander has many sources of intelligence. He puts the information from those sources together to help determine where a terrorist is, what he may be planning, and where he may be going. Do what you are there to do- track.

Information you report gives your stick leader definite information on which he can act at once. For example, you may report that your stick leader is thirty minutes behind a terrorist group, that the group is moving north, and that it is now at a certain place. That gives your stick leader information on which he can act at once. He could then have you keep on tracking and move another stick to attack the terrorist group. If a spoor is found that has signs of recent terrorist activity, your stick leader can set up an ambush or have a regular army or police unit follow up.

TRACKER DOGS

Tracker dogs may be used to help track a terrorist group. Tracker dogs are trained and used by their handlers. A dog tracks human scent and the scent of disturbed vegetation caused by man's passing.

Tracker dogs should be used with tracker sticks. The stick can track visually, and the dog and handler can follow. If the stick loses the signs, then the dog can take over. A dog can track faster than a man, and it can track at night.

A tracker dog is trained not to bark and give away the stick. It is also trained to avoid baits, cover odors, and deodorants used to throw it off the 'track. The tracker dog stick leader should let each trooper of the stick touch the dog to eliminate fears the trooper might have.

Scout dogs have limitations which should be borne in mind. Dogs have acute senses of smell, good hearing, and are attracted quickly to movement. Dogs are subject to periodic retraining and are as sensitive to the elements as humans.

The best position for the dog stick is directly in front of the patrol. Wind conditions may require that the stick move to windward to take advantage of the dog's sense of smell. Some dogs can, depending on weather and wind, sense the terrorist two hundred meters away.

The dog can be used to locate sentries and determine the extent of positions and emplacements, and may assist the stick leader in setting up his troopers without being detected by the terrorist group.

The following are some general rules for dog sticks:

1. If the handler is killed, leave the dog with him and report it to your HQ.
2. If the handler is a casualty, try to lure the dog away so you can treat him. If you must evacuate one, send the other as well.
3. Treat the stick as one of the unit. Support it and keep the handler informed of all tactical moves.
4. Let the handler select the dog's position in the line of march.
5. Seek the handler's advice in employing the stick.
6. Do not expect the tracker dog stick to perform miracles and do not relax your alertness because they are with you.
7. Do not feed or play with the dog.

Use of Tracker Dogs In Ambush Contacts

A great many insurgents wounded in ambush get away. In many cases they escape by running into the undergrowth and lying low until the hue and cry has died down and they can crawl away. The employment of tracker groups will quite often lead to their capture or elimination.

Experience has shown that the blood trail left by wounded insurgents is not always an aid to a tracker dog and is sometimes more useful as a visual aid to the human tracker.

The tracker group should not form part of the ambush party, but should stand by at some convenient RV ready to move when shooting indicates that the ambush has been sprung.

Under certain circumstances, patrol dogs may form part of the ambush group. They may be most profitably employed where several alternative routes lead into the ambush position and it is not known which route the insurgents will take. It must be borne in mind, however, that their presence may give the ambush position away to the insurgents as they pant, make other noises, and are smelly. However, when used they will invariably be alert before any human being.

TRACKING

Although the information in this chapter will not make you an ace tracker, it will give you a better awareness of tracking and the tactics employed by sticks.

The only way to become a competent, reliable tracker is to use the method of the natives: practice, practice, practice. It is a skill that can stand you in good stead on your next operation, enhance your combat effectiveness, and perhaps save your life.

Since terrorists in Africa operate in the same areas as the local population such as bush veldt areas in tribal trust lands, national parks, and game reserves, their pursuit requires abundant use of man's oldest skill: tracking. Man was first a hunter, gatherer, and tracker, having to approach game closely enough to kill it or to follow it when wounded, despite its superior speed and senses of sight, smell, and hearing.

Native Trackers

Fortunately, Africa has an abundant supply of superb trackers among the African population, to whom game hunting is still important as a means of sustenance, though illegal. African whites include some of the finest hunters and trackers in the world, but their numbers are small, so the skills of native poachers have now become a national resource employed to combat terrorism.

It is soon realized that the number of trackers available to units of the army is usually inadequate as soon as commando sticks come on the scene, because of the **greater demand** for manpower. This manpower shortage causes many operations to fail due simply to insufficient or poor tracking. Most trackers come from the most primitive tribes, and their skill is often proportionate to their lack of education and dependence on subsistence agriculture.

Throughout Africa, in the areas still hunted, trackers and hunters are in great demand by professional hunters. They are often employed as farm labor solely to have their skills available when hunting season rolls around. Native trackers are also popular in the military and the police because of their stalwart martial tradition and almost arrogant martial spirit.

However, the supply of tribal trackers available to the army and police rarely **equals the demand**, because most of those possessing such skills are illiterate, and therefore unqualified for recruitment into the regular army or police units. Some were "too old" at fifty although **lean as panthers** and in the prime of their physical and mental faculties. Sooner or later, such a valuable, if primitive, resource has to be tapped and your commando unit should not pass up such an untapped reserve.

Although tracking is not taught to African recruits, if the candidate is a natural tracker, his tracking skills are joined to military tactics, and basic military training is given to assist his service when attached to regular units of the army or to commando units. Each qualified tracker is selected from applicants by putting him through various tests by master trackers, who use every

subterfuge to foil his best efforts. First he tracks game and then humans, first with, and then without, boots on his “prey.” The pseudo-terrorist employs such anti-tracking devices as walking backwards or on stones, both on land and across streams. Walking on stones in a riverbed and crossing some distance from one’s original arrival point foils all but the top trackers- but not the African unit tracker. Although top trackers may be temporarily slowed by such methods, they will eventually pick up the spoor.

Tracker Unit Précis

The preamble to the tracker unit précis is worth repeating:

Civilian African Tracker Unit is a unit which has been formed primarily to promote and utilize more of the inherent tracking potential so abundant in our many African Lands. These men are unsophisticated and would normally not avail themselves for army conscription, but they are quite prepared to offer their services on a professional basis if along uncomplicated lines.

Generally speaking, the primitive African has a natural instinct for tracking and is either a born hunter or has spent most of his life herding and tracking down livestock. This instinct has, however, got to be motivated and then married to common military tactics, and it is with this aim in mind that this unit has carefully formulated ways and means of promoting this important auxiliary (commando unit) of the regular army forces. Having said this, it cannot be emphasized enough that you as the commando should both understand and appreciate the primitive, voluntary nature of his service when dealing with him, and it is essential that you do not overwhelm him with sophisticated military regimentation. Allow him to do his job. Don’t bind in unless discipline is necessary. Be precise in where he stands. Let him “do the job” or you will find someone else.

The tracker retains civilian status during service but is required to complete terms of service unless found unsuitable when he is returned to base. Trackers are under full army regulations while on duty and carry an identity card. Trackers do not expect special food on service but if available his traditional diet is utilized. The men are drawn from various tribes, and full sticks (four men) are made up of one tribal stock to avoid friction. Such sticks are employed only in areas of different tribal stock than their own to insure their affiliation doesn’t dampen their zeal. Such trackers work harder to insure defeat of terrorists of other tribal affiliation and will be more difficult to compromise by identification. At any stage extreme care must be maintained to avoid compromising identity since this would cause removal from duty and risk that the supreme price of being termed a “sellout” would be a fatal consequence.

Other Considerations

Incentive bonuses are offered in addition to their normal high pay which must remain confidential. Bonuses are paid for confirmed terrorist (Charley Tango) kills as a direct result of tracker’s follow-up and for outstanding performance, e.g., exceptional follow-up, in which, despite the tracker’s skill, the exercise resulted in no CT kills, contact, or discovery of arms caches. Reports are filled out by the stick leader who assesses the tracker’s performance at end of camp. These are analyzed by the unit commander and a payout is made on this basis according to government scale if a reward is officially offered.

Tracker sticks number from four at full strength, to four with a stick leader, and under him a second in command. No rank structure exists in the unit but the stick leader and his number two are given corporal stripes. Trackers are normally used on three-day patrols to ensure that one stick of the team is at base at all times, rested, ready, and alert, so as to react instantly in emergencies. Since their main function is to follow and locate spoor, these men are not strongly trained or depended upon for combat or general soldiering, and once their efforts result in a contact they normally fade into the background. However, these men, during their service, have become outstanding fighting men in many cases, with outstanding successes during contacts with terrorist groups.

Two sticks of three trackers each can be used with one commando stick leader as controller attached to each section. In this case, one tracker follows spoor and the others flank him for his

protection and to cut for lost spoor. Three groups of two trackers each can be used with two commando troopers attached to each section. One trooper is controller and the other assists in a flanking role.

These commando troops should be experienced, and so time in country with close knowledge of both the bush and the African, his language, and customs are important. This vitally necessary close communication keeps efficiency from being lost. In addition, the stick leader must stay with his sticks so the trackers get to know, respect, and understand him. Trackers are also not employed for guard duty or “shotgun riding” except in extreme emergencies. Trackers are sometimes used in the role of interrogator after capture of suspected mujibas or terrorists, but controllers must keep a good grip on them to prevent cruelty or heavy-handedness caused by tribal instincts. Keep the objective in the minds of all at all times. Do not digress into any cruelty at all or allow it. Trackers can also be used for clandestine purposes in tribal lands other than their own, if they volunteer and are given adequate protection from compromise and retribution.

Stick leaders must have the trackers’ full confidence and feel free to discuss problems with them, whether personal or military in nature, to preclude an information gap. Likewise, the stick leader should be aware of the primitive nature of his pseudo-terrorists or trackers and have their security and welfare first in his mind. He must ensure that backup is available when contact is made and that trackers must not be used as “feelers” or be allowed to wander off alone without support when a large 360-degree search is called for. Trackers quickly detect any falling back of protection units and this causes them to lose momentum on follow-ups. After a patrol, contact, or stand down, the stick leader checks all weapons for safety to avoid accidents or compromises.

During a contact, the stick leader keeps a close check on his troops so as to fade them out of the scene quickly. He ensures that trackers are not used as general fire and movement forces since their training is not intense in this area and it subjects them to more risks than necessary, both of which could cost valuable trackers or lost Charley Tangos.

Endurance tracking, consisting of as much as 50 clicks in two days, brings bonuses, as does ‘a foray into enemy territory or base camps. The tracker has an eye for camouflaged base camps, arms caches, etc., plus an ability to detect abnormal demeanor in locals which may indicate tension due to terrorist presence.

All of these are important, and when you find a tracker such as this, you and your stick must continually keep the trackers in good shape. Let the tracker know that your troops are behind him and will not let any harm come to him. In turn, the tighter the bonds get, the better your own security will become in the African bush.

COUNTERTRACKING

In addition to knowing how to track, you must know how to counter a terrorist tracker’s efforts to track you.

1. While moving from close terrain to open terrain, walk past a big tree (30 cm in diameter or larger) toward the open area for three to five paces. Then walk backward to the forward side of the tree and make a 90-degree change of direction, passing the tree on its forward side. Step carefully and leave as little sign as possible. If this is not the direction that you want to go, change direction again about fifty meters away using the same technique. The purpose of this is to draw the terrorist tracker into the open area where it is harder for him to track. That also exposes him and causes him to search the wrong area.

2. When approaching a trail (about one hundred meters from it), change your direction of movement and approach it at a 45-degree angle. When arriving at the trail, move along it for about twenty to thirty meters. Leave several signs of your presence. Then walk backward along the trail to the point where you joined it. At that point, cross the trail and leave no sign of your leaving it. Then move about one hundred meters at an angle of 45 degrees, but this time on the other side of the trail and in the reverse of your approach. When changing direction back to your original line of march, the big tree technique is used to draw the enemy tracker along the easier trail. You have, by changing direction before reaching the trail, indicated that the trail is your new line of march.

3. To leave a false trail and to get an enemy tracker to look in the wrong direction, walk backward over soft ground. Continue this deception for about twenty to thirty meters or until you are on hard ground. Use this technique when leaving a stream. To further confuse the terrorist tracker, use this technique several times before actually leaving the stream.

4. When moving toward a stream, change direction about one hundred meters before reaching the stream and approach it at a 45-degree angle. Enter the stream and proceed down it for at least twenty to thirty meters. Then move back upstream and leave the stream in your initial direction. Changing direction before entering the stream may confuse the terrorist tracker. When he enters the stream, he should follow the false trail until the trail is lost. That will put him well away from you.

5. When your direction of movement parallels a stream, use the stream to deceive a terrorist tracker. Some tactics that will help elude a tracker are as follows:

. Stay in the stream for one hundred to two hundred meters.

. Stay in the center of the stream and in deep water.

. Watch for rocks or roots near the banks that are not covered with moss or vegetation and leave the stream at that point.

. Walk out backward on soft ground.

. Walk up a small, vegetation covered tributary and exit from it.

6. When being tracked by a terrorist group, the best bet is to either try to outdistance it or to double back and ambush the group.

Tracking

SECTION 1: GENERAL

1. Tracking plays a special and very important part in maintaining contact with the enemy, in locating their camps and hides, and in following up after a contact or an incident.
2. Without considerable practical experience no man can become an expert, but with a little basic knowledge, well applied, most men can become "bush minded." As bushcraft, which includes the ability to track, is essentially a practical subject, no amount of theorizing can make an expert. Practice in the field is essential. As with most skills, bushcraft must become an automatic action which will be of the greatest value in actual operations.
3. The aim of this chapter is to give some guidance to troops employed in ATOPS in the techniques of tracking.

SECTION 2: TRACKING TECHNIQUES

1. To assist troops in the tracking of individuals or bands of enemy, some suggested techniques are listed below.
2. Action on finding tracks.
 - a. Unless it is possible to follow the spoor with either a civilian tracker or a tracker team, anyone finding spoor should isolate the scene and keep that area free of military forces until the arrival of trackers. An immediate report should be made to higher headquarters giving the following information:

- i. Estimated number of terrorists.
 - ii. Estimated age of spoor.
 - iii. Direction.
 - iv. Any other useful information such as location, terrain, type of tracks, etc.
 - b. It is absolutely essential that the spoor is not obliterated or disturbed by the discoverers. The spoor and surrounding area must remain untouched until the arrival of a tracker or tracker team. It is not possible to follow one preserved spoor when the remainder of the area has been trampled flat by military forces.
 - c. It frequently pays to backtrack when very fresh tracks are found, particularly early in the morning when they may lead from a camp.
3. Action when tracking.
- a. Work in pairs when possible.
 - b. Use a pointer to indicate the tracks. This can be a stick or even a rifle.
 - c. When a trail is faint, leapfrog the trackers.
 - d. The tracker who has the run of a track must keep on it and only change when the run is broken.
 - e. In the interests of speed, track ahead where possible and not at your feet.
 - f. Depending on conditions, use ground or aerial tracking, but if possible, use aerial tracking for speed.
 - g. Think ahead and listen for bird and game alarms which could indicate movement or presence of humans ahead.
 - h. Bear in mind minor details which aid tracking, e.g., sand on rocks, overturned leaves, etc.
 - i. Patrol members not employed with the actual tracking will adopt an open formation and be on the alert for enemy action.
 - j. The person or persons doing the tracking must at all times be protected by members of the patrol.
 - k. Tracking in overcast weather and around midday will be difficult due to lack of shadow which gives depth.
 - l. Track by "feeling" over dead leaves on damp ground for indentations if all else fails.
 - m. Do not talk -- communicate by means of hand signals.
 - n. To ascertain whether gangs are in the area, look for signs at fruit-bearing trees, water holes, trapping sites, beehives or observation points. Also watch for signs of fires, particularly in the early morning or late evening.
 - o. If the track suddenly becomes well-hidden but not lost, circle downwind and try to pick up scent, smoke or firelight, especially at night.
 - p. Be constantly aware of the possibility of trickery or deception; for example, men turning towards water, then going from tree to tree in the opposite direction; hiding underwater or underground in a wild animals burrow; shoes tied on backwards; grass bent back; walking backwards or on the side of the feet; or tying cattle hooves onto the shoes or feet.
 - q. Study the enemy's habits at every opportunity.
4. Action should the trail split. Trackers must be trained to report immediately to the patrol commander any attempt by the enemy to split up. The patrol commander then decides, on the advice of the tracker, which track will be followed. The splitting point should be marked so that the trackers can return to it and, if necessary, start again. To assist the trackers in picking up the tracks again a few hints are listed below:
- a. Examine any logs, stones, etc., in the immediate vicinity of the track for sign of disturbance.
 - b. Examine leaves and grass on either side of the track for signs of disturbance.
 - c. Attempts at deception, unless done by an expert, will often give a clearer indication of where the track is located.
5. Action when the track is lost.

When the track is lost, the leading tracker should indicate that he has reached the last visible sign of the track he is following. Trackers must be trained never to pass beyond this point without first informing the patrol commander of its exact location. A simple drill for the search is:

- a. Leading tracker halts the patrol and indicates the position of the last visible sign to the patrol commander.
 - b. The sign is marked for future reference.
 - c. Flank trackers do a circular cast working towards one another in the hope of picking up the spoor again.
 - d. While the flank trackers are carrying out the search as described above, the tracker who was on the spoor carries out a 360-degree search up to approximately 15 meters to his immediate front.
 - e. Once the spoor has been relocated, the tracker who found the spoor then takes over as main tracker. The remainder of the team fall into an appropriate tracker formation.
6. Use of aircraft for tracking.
- a. a. Light aircraft and/or helicopters can actively assist patrols during the tracking of terrorist groups by:
 - i. Spotting terrorists from the air, bearing in mind that the terrorists are likely to take cover on hearing aircraft. Aircraft may also break security and indicate to terrorists that they are being followed.
 - ii. Slowing down the terrorists as they attempt to keep under cover, thereby enabling the trackers to close with them.
 - b. Visual air reconnaissance will provide valuable information concerning the nature of the country ahead of the follow-up group. This information should enable the patrol to assess:
 - i. Likely routes taken by terrorists.
 - ii. Ambush positions.
 - iii. Camps.
 - c. Helicopters may be used to uplift trackers in the leapfrog role (explained in greater detail in Section 4 of Chapter 8: Follow-up Operations).

SECTION 3: ANTI-TRACKING MEASURES

1. Detailed below are a number of points which should be taken into consideration:
 - a. Think when moving. Do not relax.
 - b. Do not become regular in habit.
 - c. Avoid the obvious.
 - d. Watch the nature of the country carefully and use types of ground which are difficult to track in.
 - e. Use weather to advantage, that is, move in rain.
 - f. Carry a stick with which to bend grass and branches back.
 - g. On special operations, to increase deception, wear smooth-soled shoes which leave less distinctive prints, or go barefoot or use motor-tire sandals.
 - h. Walk on the side of the foot when necessary as this leaves no heel or toe marks.
 - i. Cross tracks, roads or streams by crossing in trees or on rocks. if this is not possible when crossing a wide sandy track or road, cross at one place, each man stepping carefully on the footprints of the leading man, thereby leaving only one set of prints.
 - j. Be careful with Smokey fires, tobacco smell, soap in streams or rivers, bird and game alarms or insect or frog silences.
 - k. Do not be too tempted to use water as a line of movement, as this is where the enemy will probably search or look for signs of security forces in the area.
 - l. With a large party, where possible, avoid moving in single file as this will leave definite signs and a track. move in open formation instead.

SECTION 4: HINTS ON TRAILS AND TRACKING

1. General.

- a. It is extremely difficult to move silently and quickly in most parts of the bush and consequently this requires a lot of practice and concentration.
- b. There are many paths in the bush made by game during their nightly or seasonal movements. These animals avoid steep or slippery slopes, and therefore game paths will normally provide easy going. Terrorists and military patrols use these trails when quick silent movement is required. Troops should therefore exercise extreme caution when using these trails as they might well be ambushed.

2. Tracking spoor.

- a. There are two distinct types of spoor, ground spoor and aerial spoor. The ground sign is normally made by a boot- or footprint, and aerial spoor is in the form of trampled grass, broken bushes, broken cobwebs, etc.
- b. The following are signs the experienced tracker looks for when tracking spoor:
 - i. Crushed and bent grass and vegetation.
 - ii. Broken twigs and leaves.
 - iii. Overturned leaves and stones.
 - iv. Mud displaced from streams.
 - v. Broken cobwebs.
 - vi. The state of the dew on a trail.
 - vii. Mud or scratches on stones and logs.
- c. **Man.** Barefoot prints are soft rounded impressions formed by the heel, ball of foot, or toes. Women's tracks are generally smaller and have on the whole two characteristics. Firstly, they tend to be pigeon-toed, and secondly, their toes are more splayed out than men's.
- d. **Running men.** Points to observe are skid marks, depth of impression, running on balls of feet and toes, splayed out toes and badly damaged vegetation, with resultant lack of concealment of trail.
- e. **Loaded men.** Short footsteps, deeper impressions than normal in soft ground, and toes splayed out.
- f. **Animals.** Due to the fact that most animals have cloven hooves, the impressions formed on the ground have sharp, clear-cut edges.

3. Judging the age of tracks.

- a. Weather. The state of the weather -- rain, wind, sunshine -- should always be borne in mind as it is one of the most important points in deciding the age of a track.
- b. Obliteration by rain or light rain. By remembering when it last rained, more accurate judgment of the age of tracks is possible. If the tracks are pock-marked, obviously they were made before the rain, and if they are not pock-marked they were made after the rain. Similarly, by looking to see if the tracks have been pock-marked by light rain dripping from trees, the age can be established.
- c. The state and position of trodden vegetation. Various grasses have different grades of resilience, and only practice and experience will enable a tracker to use this factor to judge accurately the age of the spoor.
- d. Bent grass or leaves. An indication of the age of a track may be gained by its dryness. Bent grass will be green initially but after a few days will turn a brown color. Again, the amount of sunshine and rain during the last few days should be taken into account.
- e. Impression in mud. Always note the state of dryness of a track in mud or soft ground. If the track is very fresh, water will not have run back into the depression made by a foot. Later the water runs back, and later still the mud which has been pushed up around the depression, and the mud kicked forward by the foot leaving the ground, begins to dry.
- f. Game tracks. Remember that most animals lie up during the day and move about at night. Therefore, if human prints on main forest game trails have at least a double set of animal spoor superimposed and these spoor show that the game has moved in both directions, any

human prints are probably at least one night old. If the animal spoor show that game has moved in one direction only, then the human prints were probably made during the night, after the game had moved down to water but before the game moved back.

4. Information regarding terrorist methods of concealing tracks and camps should also be sought.
5. Factors affecting tracking. There are certain factors which affect tracking.
 - a. Whether the ground is hard or soft, stony or muddy.
 - b. The type of country.
 - c. The weather -- things lack depth in overcast weather.
 - d. The position of the sun relative to the direction of travel. The most suitable position is when one has to track towards the sun.
 - e. The footwear of the human quarry. A distinct boot pattern is obviously easier to follow than a plain-soled spoor.
 - f. The extent to which other similar tracks may confuse and possibly blur the spoor. g. Concentration and the effect of weariness.
6. Things the tracker must look for.
 - a. Footprints and impressions of footwear: the rhythm of the spoor or the length of stride of the quarry. This is a guide to where the next footprint may be found.
 - b. Trampled grass, soil, and marks in the soil where indirect pressure may have left no impression
 - c. Disturbed stones, sticks or so .
 - d. Leaves which have been turned, crushed, kicked or pulled off trees; branches and twigs bent or broken and vegetation pushed aside; the reflection of light from grass or leaves displaced at an angle; the color of bent and broken vegetation; and scratched or chipped bark.
 - e. Discarded wrapping and masticated vegetation.
 - f. Cobwebs broken or wiped off onto a nearby tree or bush.
 - g. Urine and excrement, frequently indicated by house flies and yellow butterflies, and dung beetles during the rains.
 - h. Snares and traps, robbed bees' nests and smoke.
 - i. The state of dew on the spoor.
 - j. Mud displaced from streams or mud on stones and logs.
 - k. Squashed animal or insect life, and whether it has been attacked by ants.
7. A tracker has many things to consider while tracking. He must possess certain qualities, such as above average eyesight, memory, intelligence, fitness, anticipation and understanding of nature. Patience, persistence acute observation and natural instinct are the basis of good tracking There are times when pure instinct alone will draw a tracker in the correct direction. All units should ensure that training in aggressive bushcraft is maintained at the highest possible standard.

SECTION 5: USE OF DOGS IN ATOPS

General

1. **Aim.** The aim of this section is not to instruct on the handling and training of dogs, but to provide an infantry commander with sufficient background information to enable him to usefully deploy any dogs and dog handlers that may be placed at his disposal.
2. Under no circumstances will a dog be attached to an army formation without the service of a handler also being provided. The dog and handler are a highly trained team, and a dog cannot be handled by another person.
3. The handler is an expert in his own field and can give advice on the capability of his dog and the conditions under which it can be used to best effect. He is not, however, responsible for the tactical deployment of his dog. The decision, how and when to use the animal and its handler, rests with the local army commander.

4. To obtain the maximum value from trained war dogs, it is essential to have an understanding of the conditions best suited for their employment. Dogs, like the rest of the animal kingdom, are subject to outside influences which have a direct bearing on their behavior. It follows, therefore, that the performance of any dog, no matter how highly trained, is not constant and it cannot be expected to work efficiently under every type of condition. This is often not fully appreciated, and instances have occurred where adverse criticism has been leveled against a dog simply because the person responsible for its employment was ignorant of its limitations. Full value will only stem from a full knowledge and better understanding of the capabilities and characteristics of the dogs. It must be remembered that a dog tires easily and consequently must be used sparingly and to the best possible advantage.
5. The efficiency of a dog is in direct ratio to that of its handler. It is, therefore, most important to select suitable men for training as handlers. Handlers must, therefore, only be changed if absolutely essential.
6. War dogs are a valuable weapon which, when properly used, provide an advantage over the enemy. The fullest use should therefore be made of them.
7. The types of war dogs that are in common use are:
 - a. Patrol dog.
 - b. Tracking dog.
 - c. Mine detection dog.
 - d. Guard dog.
 - e. Dogs for use in crowd control purposes will not be discussed in this section.
8. Limitations. Certain limitations must be stressed:
 - a. The dog is apt to become perplexed when large numbers of people are in a small area, e.g., when opposing forces are in close contact.
 - b. The dog is apt to become bewildered when the magnitude and number of extraneous sounds are abnormal, e.g., when the battle is intense.
 - c. The dog cannot differentiate between enemy and its own troops. Full briefing to a patrol is essential to prevent "pointing" on scattered elements or groups of troops.

The Patrol Dog

1. **General.** A patrol dog works by "air scent" and hearing, and is trained to give silent warning of any individual or group of individuals by pointing. He is not taught to attack and cannot be used as a tracker. The patrol dog is therefore useful for giving silent warning of ambushes, attempts at infiltration, and the presence of any "foreign body," before such presence can be detected by a human. He can be worked either by day or by night, in most kinds of weather and country.
2. The distance at which warning is given depends upon the following factors:
 - a. Ability of the handler to "read" his dog.
 - b. Wind direction and velocity.
 - c. Concentration of scent.
 - d. Humidity.
 - e. Density of vegetation.
 - f. Volume of noise in the vicinity.
 - g. Condition and fitness of dog.
 - h. Individual inherent ability.
3. Operational employment. The patrol dog can be employed in two ways:
 - a. On a lead.
 - b. Loose in front.

In both cases, the dog is controlled by a handler.

4. When moving to an operational area, the dog is kept at heel -- while in this position, the dog knows he is off duty and is not on the alert. When on duty, the collar is removed and either the

- "pilot rope" is put on and the dog is told to seek, or the dog works loose and the command "seek" is given.
5. Both handler and dog have to be more highly trained to work with the dog loose.
 6. The dog points by one or a combination of the following signs:
 - a. Raising of head and pricking-up of ears.
 - b. Tensing of body.
 - c. Tail wagging.
 - d. Keenness to investigate.
 7. Uses. The patrol dog can be used:
 - a. On reconnaissance patrols.
 - b. On fighting patrols.
 - c. As a sentry outpost.
 - c. Guarding forward dumps.
 - d. With static security groups.
 - e. In isolated positions.
 8. On patrol. The handler and the dog will normally lead. However, if the dog is being worked loose, it may be possible for the dog to lead followed by the armed scout of the "recce group" with the handler (who is constantly in sight and in control of the dog) next. This makes the handler's job a trifle less hazardous. In any case, close contact must be maintained between handler and patrol leader. The normal procedure is:
 - a. The patrol commander indicates to the handler the mission, disposition of own troops, the general direction of advance and any special location instructions.
 - b. The patrol is ordered to move out.
 - c. The patrol dog and handler with one escort precedes the patrol at a distance which will permit immediate communication with the patrol commander. At night this would be about an arm's length. In daylight the distance will be greater, but within easy visual signaling distance.
 - d. The patrol dog and handler move off, keeping generally in the indicated direction. He must be allowed to take advantage of wind and other conditions favoring the dog's scenting powers without endangering the patrol.
 - e. When the dog points, the handler indicates by silent hand signal "enemy in sight."
 - f. The patrol halts and takes cover.
 9. Patrol commander proceeds quietly, utilizing available cover, to the handler and dog, and makes his plan.
 10. Sentry outposts. The main value of the dog is to give timely warning of approach of, or attempts at infiltration by, the enemy. The handler and dog are placed a short distance from the sentries: this distance will be within easy visual signal range in daylight, but much closer at night. A simple means of communication between handler and patrol commander at night is a piece of cord or string, which is jerked to alert everyone. When alerted, the patrol commander proceeds immediately to the handler to receive any information concerning the distance and direction of the enemy.
 11. Guarding forward dumps, static security groups and isolated positions. The use of patrol dogs on these rare occasions is the same as for a sentry outpost with local modifications. In all cases the local commander should take the advice of the handler as to the best employment of the dog or dogs.

The Tracking Dog

1. **General.** Tracking dogs are trained to follow human ground scent. The principle on which the dogs are trained is one of reward by food. The dog is never fed in kennels but only after work, i.e., a successful track.
2. **Tracking conditions.** The ideal tracking conditions may be listed as follows:
 - a. Air and ground temperatures approximately equal.
 - b. A mild dull day with a certain amount of moisture in the air with slow evaporation.

- c. Damp ground and vegetation.
 - d. Ground overshadowed by trees.
 - e. Blood spilled on trail.
 - f. A running enemy who gives off more body odor than one who has walked away calmly.
 - g. An unclean enemy.
3. Factors which adversely affect tracking include:
- a. Hot sun.
 - b. Strong wind.
 - c. Heavy rain.
 - d. Roads (tarmac) on which cars travel.
 - e. Running water.
 - f. Bush fires.
 - g. Animal scent.
4. Heavy growth of vegetation helps to combat the heat and retains more scent. Furthermore, a greater amount of vegetation is damaged by a running enemy, thus producing an increased aroma.
5. **Operational employment.** The most important single factor in the successful employment of a tracking dog is time. The dog must be brought to the scene of the incident with all possible speed and not used as a last resort. It is suggested that tracking dogs be held at a base or some central point until a call for their services is made and then taken as near as possible to the scene of the incident by transport or helicopter in order that they may arrive fresh. The degree of fatigue a tracking dog has reached will determine its usefulness.
6. Once it has been decided to use a tracking dog, the less fouling of the area with extraneous scent the better. Objects liable to have been in contact with the person to be tracked should not be touched and movement over the area restricted to a minimum.
7. Great care must be taken to keep the use of tracking dogs as secret as possible. If the enemy know they are likely to be tracked by a dog, they will very probably take counter-measures.
8. Use of tracker dogs on night follow-up. Tracking dogs have successfully worked night trails and have shown that they are capable of working night trails in fairly difficult terrain. There are, however, certain facts which detract from the use of dogs on a night follow-up; they are:
- a. The dog, when on a trail, moves at a brisk pace and while military forces can maintain this pace during the hours of daylight, it is most difficult to maintain the formation and contact with one another when moving at this pace at night. There are certain inherent difficulties attached to a night follow-up, all of which are aggravated if one has to move at a fast pace.
 - b. In daylight hours the handler can see his dog and very often from its behavior can determine whether or not it has left the human trail. When this happens the handler is in a position to correct the dog and put it back on the trail it should be following. At night it is more difficult for the handler to establish whether the dog has left the trail and therefore it will be necessary for the handler to more frequently check the trail being followed. The use of a torch or naked light is undesirable, but this can possibly be overcome by the use of infrared equipment. An additional assurance would be the use of an expert tracker in conjunction with the dog.
 - c. In thick bush it is very difficult for military forces to maintain contact with each other and a great deal of noise is also made.
 - d. The greatest danger of this type of follow-up is the fact that the chances of walking into a prepared ambush are very much increased. The points raised in the paragraphs above can be overcome with constant practice.
9. In the event of a terrorist attack during hours of darkness, tracking dogs can be of great assistance in locating the trail and being permitted to follow this trail for approximately half an hour or so to establish clearly the line of flight of the terrorists. It is suggested that in this case the dog and handler be backed by a small number of men merely for local protection and not as a follow-up group in the true sense. Once this has been established, the controlling headquarters can plan stop lines and follow-up action.

Mine Detection Dog

1. This animal is trained to detect mines, booby traps, tunnels, hides or ammunition caches. The scout dog is trained to detect and sit within two feet of any hostile artifact hidden below or above ground, to discover tripwires, caches, tunnels and "punji pits," and to clear a safe lane approximately eight to ten meters wide.
2. A commander who properly employs a scout dog team can rely on the dog to safely discover approximately 90 percent of all hostile artifacts along his line of march. This depends, naturally, on the state of training of the animal.
3. Since this animal is a specialist in its own right, it is vitally important that this team be provided with adequate protection while working. It may be necessary to make use of the patrol dog to give this added protection.

Guard Dog

1. General. The role of the guard dog is to give greater security to guarded installations. Because the dog's senses are more acute during hours of darkness and when distracting influences during these hours are reduced to a minimum, its use should be directed towards the replacement or supplementing of night sentries or guards.
2. Employment. They can be used to protect sensitive points and other installations. When on duty these dogs can:
 - a. Be on a leash under direct control of a handler and used as a prowler guard within the installation or along the perimeter of the installation being protected.
 - b. Be allowed to run loose within a building or fenced-in area.
 - c. Be attached to a "run wire" whereby the animal can move freely within the area of its beat.
 - d. Run loose in dog runs on the perimeter of the key point or installation.
3. They can alert the guards or dog handler by barking, or the more vicious type is taught to attack any intruder immediately.

Conclusions

1. Dogs may be transported by helicopters or other types of light aircraft. The animals travel well and do not suffer any discomfort. Do not expect too much of a dog; it must be borne in mind that the dog can be defeated easily by the ingenuity of man.
2. A very important point to remember is to ensure that the right type of dog is requested when required. Do not ask for a patrol dog when a tracking dog is required.

Follow-up Operations

SECTION 1: GENERAL

1. The aim of the follow-up or pursuit is to track down, attack and destroy an enemy group that may or may not have had contact with the military forces.
2. From the above paragraph it is apparent that a follow-up is mounted when the enemy has been detected by the security forces or the population, or through tracks, and an operation has to be planned to make contact with the enemy and to destroy him. It will also be obvious that the enemy will eventually become aware of this follow-up and will do everything possible to conceal his tracks and to disrupt and delay the follow-up by employing delaying tactics such as ambushes, snipers and perhaps booby traps.
3. Maximum use must be made of expert trackers, tracking teams and tracker dog teams. Helicopters and light reconnaissance aircraft can be and must be effectively employed during the operation. Helicopters can be employed to leapfrog follow-up teams, thereby keeping the follow-up troops relatively fresh. Once the general direction of the enemy's movement has been determined, helicopters can be used to deploy troops ahead of the fleeing enemy to ambush and cut him off.
4. Although it may be difficult to determine the enemy's movement pattern beforehand, the follow-up force must endeavor to establish this pattern as soon as possible to be able to cut the enemy off, close with him and destroy him within the shortest possible time.
5. The main factor to remember is that the enemy must not be given a chance to rest up or to organize a well-defended position/ambush. Pressure must be applied relentlessly and every opportunity of harassing and inflicting casualties on the enemy must be taken.

SECTION 2: METHOD OF OPERATION

1. It is difficult to lay down in this manual exactly how the operation must be conducted. It is basically a tracking operation to seek the enemy out and, once he has been located, to then attack and destroy him.
2. The first requirement is to locate the enemy's tracks and try to determine the age and direction of the tracks and the strength of the enemy.
3. As soon as the tracks are located, the patrol is to indicate the age and direction of the tracks and the estimated strength of the enemy. If the patrol has no tracker and a tracker team is available, they are to report the tracks and await the arrival of a tracker team. The patrol must not attempt to follow the tracks and must confine its search to the immediate vicinity so as not to inhibit the work of the trackers. However, when a tracker team is not available, immediate follow-up action must be taken by the patrol.
4. Depending on the strength of the terrorists, a platoon or more is to be deployed for the follow-up. If the tracks are at a distance from the operational headquarters, it may be necessary to establish a field headquarters with army/air force and police representation at a nearby landing zone, airfield or road head. The field headquarters is then tasked with the control of the follow-up, and is allocated the required troops, police and aircraft.
5. The force adopts the follow-up formation incorporating the tracker team and moves at best tracking speed. As soon as possible after the follow-up has commenced, the follow-up group is to confirm the age, direction and strength of the tracks and report progress as often as possible. Changes in direction, the splitting of the tracks, hides and resting places are to be reported immediately.
6. During daylight, the follow-up group will, if possible, be supported by an armed light aircraft which is also to operate in the reconnaissance and communications role. However, if the tracks are over 48 hours old, an unarmed light aircraft can be used, but should be replaced when a contact is considered reasonably imminent. When tasking the supporting aircraft, commanders must assess whether it should remain behind the follow-up group in the hope of achieving surprise or whether it can range ahead in order to slow down terrorist movement and to spot likely marching points, water holes and routes through escarpments, rivers, etc.
7. Depending on the age and direction of the tracks, the following procedures can be adopted;

- a. Leapfrogging.
 - i. If the tracks are assessed as being several or more days old, the follow-up group can be helicoptered from 1,000 to 5,000 meters forward (depending on the terrain and the estimated line of movement) and then fanned out to relocate the tracks. If successful, leapfrogging is repeated until the tracks are considered to be fresh enough to follow on foot (from 24 to 48 hours old).
 - ii. The procedure for the search for tracks after leapfrogging is similar to airborne tracking (detailed below). That is, on landing, troops cast up to several hundred meters on either side of the landing zone. If the tracks are relocated, their age and direction are assessed and, if necessary, another leapfrog is made; if not, the helicopter repositions the troops in another search arc until the tracks are found.
 - iii. When possible, leapfrogging should always be supplemented by keeping an additional force on the original trail so that a marked change in direction, the splitting of tracks or a hide can be spotted. This force is also conveniently placed to reinforce the follow-up groups in a contact. This force will also be able to determine whether any reinforcements may have joined the enemy.
 - b. Stop groups.
 - i. As many stop groups of patrol (section) strength as possible should be placed astride the estimated line of advance, at a distance ahead of the follow-up group dictated by the terrain and the age of the tracks. Should time allow it and there be sufficient troops available, the stop groups should be double banked, thereby ensuring greater depth to the stop line. These stop groups should be allocated specific areas with well-defined boundaries. Depending on the situation, the commander should be prepared to continuously readjust his stop positions.
 - ii. Immediately on positioning, the stop groups may patrol, if directed, to the area of the next stop position, i.e., a sidestep, to check whether or not the terrorists have crossed the stop line. (This precaution may be necessary as the estimation of the age of the tracks could be wrong.)
 - a. If tracks similar to those being followed are found, a leap-frog is made and the follow-up continues from the last spoor. Again, the bound covered by the leapfrog should be followed on foot for the reasons given in paragraph a.3. above.
 - b. If no tracks are found, the stop groups either remain in ambush until contact is made, or a sidestep back to their original positions is ordered, or the stop line is readjusted on information received.
 - iii. When the stop groups remain in position for any time, they may be directed to sidestep at first light, just before last light and more frequently if necessary. When static, particularly at night, they are to ambush the most likely route in their area. 4. When all stop groups have been positioned and if a helicopter is available, it may be possible to mine or booby trap other routes. The following considerations must be taken into account:
 - a. Coordination between the mine-laying teams and follow-up group.
 - b. Availability of specialists and equipment.
 - c. Provision to lift the mines as soon as possible or when necessary.
 - c. Backtracking. As soon as possible after the follow-up starts, an additional force should be tasked with back-tracking from the original point where the tracks were found. Their mission is to check that no other gangs/groups have split before the follow-up started and that the terrorists have not left stay-behind parties in bases along their route. This force may also fulfill an important intelligence-gathering role such as the location of the crossing point (if not already known), hides, resting places, etc., which may help establish a movement pattern, and the recovery of abandoned documents, kit and equipment.
8. The follow-up will normally take place during daylight with the follow-up group basing up on the tracks at last light. Although the terrorists may move at night, it is hoped that they will either

contact the stop line or their movement will be slow enough and their tracks less concealed for them to be overhauled on foot or by leapfrogging.

SECTION 3: AIRBORNE TRACKING

1. This system of tracking is used when quick results are important or when a large area must be checked with few troops. Naturally, the use of helicopters is desirable, but their availability may restrict the use of airborne tracking to essential occasions only.
2. The method adopted depends on the area to be covered and the number of helicopters tasked. In a reasonably safe area a single helicopter can be used, but it is preferable to use two, one of which should be armed.
3. Each helicopter carries four men: two trackers and two tracker guards. If, however, one of the helicopters is a "gunship" (20mm or heavier), only one helicopter should provide top cover.
4. Ground is covered by cross-graining, with one helicopter landing at each likely route, e.g., game trail, clearing, pan, river bank, ridge line, etc. The other helicopter should provide top cover.
5. On landing, a tracker and guard deplane on each side of the aircraft and cast for spoor right and left for 100 to 500 meters depending on the nature of the ground.
6. If no tracks are found, the process is repeated until the area is covered, with the helicopters landing alternately so that the trackers are rested.
7. If tracks are located, the second stick is deplaned (resulting in a tracker combat team of four and four guards) to either start the follow-up or await the arrival of reinforcements.
8. Each stick is to carry at least one radio to maintain contact with the helicopter and for use in the follow-up action.

SECTION 4: MOVEMENT

1. It is important that the fleeing enemy be given no respite and chance to consolidate. Movement of the follow-up force, therefore, becomes important and it must be carefully controlled and executed so that the follow-up troops are not unnecessarily worn out and that casualties to own troops are kept to an absolute minimum.
2. During the follow-up it is imperative that the follow-up force commander continually study the ground ahead, using his eyes and map, and making a careful appreciation of the terrain. This will assist him in deciding on the best formation to use and the possible route followed by the enemy. It may also indicate to him natural obstacles to be avoided and likely places where the enemy may decide to make a final stand or site ambushes.
3. Movement during the follow-up is done at the best tracking speed or fastest speed that the terrain and enemy delaying tactics will allow. Precautions must be taken against blundering into an enemy ambush, but the follow-up force must not be over-cautious, because every minute lost gives the enemy more time and a better chance to conceal his tracks and make good his escape.
4. The follow-up will invariably be done during daylight hours because it will be extremely difficult or even impossible to do tracking at night, especially in difficult terrain. This means that the follow-up will commence as soon as possible after first light when the tracks or signs become discernible, until it is too dark to follow or pick up any signs.
5. During the day it will be necessary for the troops to rest up for a while and have something to eat. Should the force be large enough, the leapfrog system will be introduced so that, while a group is resting or having a quick meal, another continues the follow-up, thereby maintaining the pressure. The group that has rested will then have to catch up later with the rest of the follow-up force. At section or patrol level, rests and breaks for meals will have to be restricted to the absolute minimum, if at all, so that the pressure can be maintained. Should the follow-up operation continue over a number of days, it will be necessary to rotate the troops, thereby ensuring that fresh troops are always on the enemy's tracks.
6. Formations during the move will be determined by the nature of the terrain, best or safest traveling speed and enemy tactics or delaying methods. Scouts and trackers will probably work in pairs,

relieving each other. The protection group will most probably have to move abreast of each other to be able to give maximum protection to the scouts and trackers and also prevent the main body from walking into an ambush.

7. Probably the most difficult aspect of the follow-up operation is that the troops may have to carry all their equipment and kit. As the follow-up may last several days and cover a considerable distance, it will not be feasible to dump the kit and equipment 'somewhere and then return at a later stage to collect it. It is therefore important to ensure that a follow-up force is equipped as lightly as possible, carrying only the bare necessities, sufficient ammunition, water and rations, and perhaps a lightweight blanket. In order to maintain the momentum and to prevent unnecessary delays, it may be necessary to resupply the follow-up force.
8. Should the follow-up force lose the enemy's tracks or contact altogether, the suggested action is as follows:
 - a. Establish a temporary base, adopt all-around observation and provide all-around protection. The enemy may be very close.
 - b. Determine an effective patrol pattern and warn two or three recon- naissance patrols, with trackers, if they are available, to stand by for immediate patrolling.
 - c. Having issued orders, send out two or three reconnaissance patrols to patrol forward and laterally, according to the patrol pattern, with the aim of finding the enemy's tracks or to look for signs and sounds of the enemy. These patrols should be restricted in the distance that they move away from the temporary base, probably a thousand meters at the most.
 - d. Should they find signs, the patrols will return as quickly as possible to the temporary base, inform the commander and resume the follow-up as soon as possible.
 - e. Should no further signs of the enemy be found, the force commander could either remain in his present position and start on a deliberate patrol program to search the area more thoroughly, or he could move his temporary base forward in the original direction of movement for approximately a thousand meters, and repeat the searching and casting forward system with small reconnaissance patrols. In this case the decision could be made for him by his next higher headquarters, depending on how close he was behind the enemy.
 - f. The important point to remember is not to cast about aimlessly with a lot of troops when the enemy tracks are lost. This will create additional tracks and signs, confusing the entire issue and probably obliterating traces of the enemy.

SECTION 5: CONTACT PROCEDURE

1. As soon as it is assessed that the tracks are fresh and a contact imminent:
 - a. Available helicopters are concentrated at the nearest troop concentration, e.g., field headquarters.
 - b. An armed aircraft is tasked to replace any reconnaissance aircraft supporting the follow-up group.
2. Depending on the situation and the number of helicopters available, one helicopter may be tasked for airborne control. It is essential that this aircraft be fitted with an extra headset, and has the means for the army controller to communicate with ground forces and supporting aircraft.
3. Any remaining helicopters are tasked for reinforcement or the positioning of stop groups. The force is broken down into sticks, stick commanders appointed and all are placed on immediate standby. Again it is essential to have the extra headset so that stick commanders can be briefed by the pilot or controller in flight. One of the helicopters tasked to fly in reinforcements/stops will also carry ammunition for resupply to the contact group, if necessary.
4. On contact, the follow-up commander must relay "contact, contact" to the pilot of the supporting aircraft and as soon as possible give a brief SITREP. The pilot relays the information to the control headquarters and then stands by to give air support. He is to try to pinpoint the contact area, the positions of own troops and likely escape routes, landing zones, etc.
5. The situation will determine whether it is necessary to deploy an airborne controller (ABC). The backup helicopters could be called forward immediately, depending on the urgency and the

magnitude of the contact.

6. There are certain problems associated with airborne controlling which should be taken into account by the local army commander, i.e., disorientation, air sickness, aircraft noises associated with airborne radios and maps being blown around in the helicopter. Subject to these considerations, and should an ABC be considered necessary and practical, the following procedure should apply:
 - a. In flight to the contact area, the ABC is to receive a brief from the supporting pilot and then the contact commander and obtain the latest SITREP. This is to include the need for reinforcement and, if so, the direction of the approach of the reinforcements and/or the need for stop groups. In addition, an ammunition state should be given.
 - b. Once overhead, the ABC, the pilot and gunner must try to visually pinpoint the terrorist and own troop positions as quickly as possible. This may be difficult in thick bush, in which case the ABC is to call for FLOT and target indication.
 - c. During orbit of the contact area, the ABC is to select a suitable landing zone for reinforcements, if required, and select stop positions and adjacent landing zones. He will then give an in-flight briefing to the stick commanders in the backup helicopters and direct their deployment.
 - d. While orbiting the contact area, the ABC helicopter may well be able to influence the battle with supporting fire or engage escaping terrorists. The decision to fire the helicopter-mounted weapon is the prerogative of the pilot, but no fire is to be opened until the ABC is satisfied with the target in relation to own troops.
 - e. The ABC helicopter should, if possible, remain over the contact area until the contact has ended. This may necessitate changing helicopters at a nearby landing zone if the original aircraft runs out of flying time. Alternatively, in a large-scale contact, when more troops are needed as reinforcements/stops, the ABC should deplane and assume command of the ground forces.
 - f. Once the backup helicopters have positioned their sticks, they are to return to the control base for more troops, if required, or are to remain on standby for further deployments and/or casualty/terrorist evacuation.
 - g. Depending on the situation, a light aircraft may be used for ABC.
7. Air strikes are employed as follows:
 - a. If the contact commander considers that an air strike is needed before the arrival of the ABC and reinforcements, he is to communicate his request directly to the supporting aircraft. The laid down procedure is then effected, but in addition the pilot of the supporting aircraft is to inform the control base or, if in flight, the ABC, that a strike has been called for.
 - b. However, once the ABC is overhead the contact area and has established communications with the contact commander, the ABC assumes responsibility for requesting an air strike. The procedure is then the same as laid down for requesting air strikes, and the ABC will monitor communications between the pilot and the contact commander.
8. The following post-contact action is necessary:
 - a. Immediately after the contact, the contact commander is to split his force (including reinforcements and/or stop groups) and detail one group to thoroughly search the contact area. The other group is to move out from 500 to 1,000 meters and conduct a 360 degree search around the contact area. This group is to search for the tracks of escaped terrorists and for secondary hides and rendezvous.
 - b. Unless the whole terrorist gang was eliminated, an area ambush is to be set on the contact area in the hope that some terrorists may return in search of kit or food, or to reorientate themselves if lost.
9. As already mentioned, the enemy will employ various tactics and ruses to delay the follow-up force once he becomes aware of it. The follow-up troops must be well drilled in their immediate action drills, and the follow-up force commander must be able to decide almost instantaneously whether his force has walked into a deliberate ambush, is being sniped at by an individual or two,

or has encountered booby traps. Quick decisions of this nature will enable the commander to give the necessary commands to counter the enemy action immediately.

10. The point to remember is that, by means of his delaying tactics and harassing of the follow-up force, the enemy is trying to buy time to make good his escape. Consequently, the follow-up force's reactions to these delaying tactics must be immediate and executed as well-rehearsed drills, thereby only losing minimum time. The encounter drills as described in Chapter 6 could, under certain circumstances, be used. Remember that time must not be wasted.
11. Immediate actions executed boldly but with a certain amount of caution will unsettle the enemy and force him to abandon his delaying positions more quickly. It is the commander on the spot who will have to decide what the best course of action will be and, having decided, to react immediately.

SECTION 6: COMMUNICATIONS

1. The controlling headquarters must have and maintain good communications with the follow-up forces. This is essential for planning purposes. If necessary, relay facilities should be provided.
2. The follow-up force will also have to be provided with good ground-to-air communications, as the air arm can play an important role and can only be used effectively if there are good communications with the ground forces.

SECTION 7: CONCLUSION

1. The follow-up operation is essentially a practical application of tracking techniques, but with the force so organized that it is well balanced, relentless and determined to come to grips with the enemy and to attack and destroy the enemy once he has been contacted. Main factors leading to a successful conclusion of such an operation are as follows:
 - a. Correction grouping of the force.
 - b. Determination and maintenance of pressure.
 - c. A high degree of physical fitness.
 - d. A high standard of bushcraft.
 - e. Good communications.
 - f. Effective employment of the air arm.
 - g. Well-planned and coordinated movement.
 - h. Careful appreciation and route planning of terrain which the force must move over.
 - i. A high standard of battle drills that will stand the force in good stead and minimize casualties when contact is made with the enemy.
 - j. Aggression and flexibility in the planning and execution of the follow-up.

RURAL TRACKING OPERATIONS

Trackers may not be necessary in an African unit or those units which have become proficient in bushcraft. Other units may have to have police, civilians or African soldiers attached to patrols for

tracking duties.

As terrorists are likely to become masters of bushcraft, they will probably rely on superior ability to “out see” and “out walk” security forces. Their ability to track and read tracks naturally will make them more proficient in hiding their own. This will necessitate members of the Security Forces being expert trackers themselves, or being able to work with and understand loyal African trackers.

Using surrendered terrorists. So far as ex-terrorist trackers are concerned, the fact that they have surrendered and led security forces to a good kill does not indicate that they have changed their loyalty. The mere fact that they are prepared to cooperate with the Security Forces against their fellow terrorists demonstrates their lack of loyalty. They should be used whenever appropriate. They should be continually reminded in one way or another that they are exceptionally fortunate not to have been shot before their surrender, that they are on probation and have a score which can only be settled by continuous and satisfactory service. Extreme care should be taken to avoid surrendered terrorists leading our patrols into ambushes.

Tracker Combat Teams

General. The ideal Tracker Combat Team consists of four men, all of whom are expert trackers. This four man team should not be split down unless it is of vital operational necessity to do so.

- Role.

- a. Locating spoor.
- b. Tracking and destroying small groups of terrorists.
- c. To provide a tracker group as part of a larger follow-up group.
- d. To locate terrorists who are still undetected.

- Organization. A Tracker Combat Team consists of the following combinations:

- a. The tracker on the spoor.
- b. Two flank trackers.
- c. The tracker control.

- Tracker Combat Team Capabilities.

- a. The ability to locate spoor quickly should it deviate.
- b. The ability to search for and locate spoor quickly when it is temporarily lost.
- c. The ability to rotate duties within itself so as not to tire the person actually tracking.
- d. To be self contained in tracking, observation and protection.

- Individual Tracker Tasks.

- a. The tracker follows the spoor.
- b. The flank trackers perform the following tasks:
 - (1) The main task of the flank trackers is to provide protection for the tracker on the spoor.
 - (2) They pick up the spoor if it veers to the left or the right.
 - (3) They carry out a circular cast if the spoor is lost.
 - (4) When advancing, they swing towards one another and out again to the flank position in an effort to locate the spoor ahead of the tracker and speed up tracking. Great care is exercised to ensure the spoor is not obliterated or disturbed by the flank trackers.
- c. Tracker's Control carries out the following functions:
 - (1) He controls the teams activities by the use of signs and signals.
 - (2) He is additional tracker protection.

- (3) He reports progress to the commander of the follow-up troops.
- (4) He is the eyes and ears of the tracker team.
- (5) When the spoor is lost, he marks the last positive sign while the remainder of the team search the area for the spoor.

Action on Finding Tracks.

a. Unless it is possible to follow the spoor with either a civilian tracker or a Combat Tracker Team, anyone finding spoor should isolate the scene and keep that area free of security forces until the arrival of trackers. An immediate report should be made to higher headquarters giving the following information:

- (1) Estimated number of terrorists.
- (2) Age of spoor.
- (3) Direction.
- (4) Any other useful information such as location, terrain, etc.

b. It is absolutely essential that the spoor is not obliterated or disturbed by the discoverers. The spoor and the surrounding area must remain untouched until the arrival of a tracker or tracker team. It is not possible to follow one preserved spoor when the remainder of the area has been trampled flat by security forces.

It frequently pays to back track when very fresh tracks are found, particularly early in the morning when they may lead to a camp.

Tracker Combat Team Formations. There are two essential formations used:

- a. Open formation for fairly open country.
- b. Single file for very thick bush.

(Both formations are shown in Annex)

Tracker Combat Team Follow-Up Tactics. Annex shows Tracker Combat Team formations. These are superimposed on to follow-up formations normally adopted by Rhodesian troops in operations. (See Appendices to Annex).

a. Open Country.

- (1) Flank trackers remain slightly ahead of the main tracker who is in visual contact.
- (2) If the spoor veers off to the left or right, it should be picked up by either of the flank trackers. The flank tracker who picks up the spoor continues as main tracker on the spoor. The remainder of the team conform with the standard patrolling formation with the last main tracker filling in the vacant flank position.
- (3) If the spoor is lost, flank trackers do a circular cast working towards one another in the hope of picking up the spoor again. By this method, a 360 degree circle is completed in the area where it was lost.
- (4) While the flank trackers are carrying out the search as described above, the tracker who was on the spoor carries out a 360 degree search approximately 15 yards to his immediate front.
- (5) Tracker control marks the last positive spoor and provides protection for the trackers.
- (6) At this stage the team is particularly vulnerable and the team relies completely on the alert state of Tracker Control.

b. Thick Country.

- (1) The main tracker follows the spoor with Tracker Control within ten yards of him as protection man. Tracker Control does not attempt to follow the spoor as he observes and listens for the tracker team.
- (2) If the spoor is temporarily lost, Tracker Control marks the last positive spoor and the flank trackers now in single file behind Tracker Control cast around in an enveloping 360 degree circle in an effort to find the spoor (See Annex , Appendix 1 and 5)

(3) The main tracker completes a 360 degree circle approximately 15 yards to his immediate front.

(4) Once the spoor has been relocated, the tracker who found the spoor then takes over as main tracker. The remainder of the team fall into an appropriate tracker formation.

Tracker Combat Team and Follow-up Troops Combinations.

a. It must be appreciated that all formations are subject to variations depending on the type of country and the appreciation of the commander of the patrol.

b. There are a number of formation permutations in current use in the Rhodesia Army (See Annex and Appendices).

c. There is considerable variation in the Rhodesian bush between the summer and winter months, and these formations are adaptable to either open country or thick bush.

Use of Dogs

The only tracker dogs at present available to Security Forces in Rhodesia are those used by the Police. Both dogs and handlers are extremely well trained for Police requirements.

These dogs have been used in COIN Operations but have achieved only limited success. It is doubtful whether these dogs would be made available for general operations but the occasion may arise when a dog is again attached to a patrol for tracking purposes.

The dog will normally follow the freshest track, but he will, if "given the scent" from personal clothing or belongings, discriminate and follow the scent of that particular quarry.

It should be realized that dogs tire easily, and therefore they should only be used for tracking when visual tracking becomes very difficult or impossible. If the tracks become visible once more visual tracking should be resumed to conserve the dog's strength and concentration.

Apart from obvious factors which cause the quarry to leave a strong scent, e.g. blood, dirty body and clothes, sweat or panic, there are certain climatic factors which influence scenting conditions:

a. Favorable.

(1) Air and ground temperatures approximately the same.

(2) Dull, damp weather.

b. Adverse.

(1) Hot sun.

(2) Strong winds.

(3) Heavy rains.

(4) Tarmac roads, rock and other hard surfaces.

(5) Dust.

(6) Running water.

From this can be deduced the following facts regarding scenting conditions:

a. The dogs will track well at night, in the early mornings and late evenings.

b. The periods of the rainy season will be favorable for tracking except during heavy rain and immediately afterwards.

c. The bush should nearly always produce good conditions, but here the presence of game may cause confusion.

d. The employment of tracker dogs in towns and villages is very rarely worthwhile.

e. Under the most favorable conditions, it will be quite feasible to follow tracks up to 12 hours old.

f. Under unfavorable conditions, there may be no scent at all even if the quarry is only a few minutes ahead.

Dogs should not be used as a last resort and once the decision is made to use a dog, the area must not be “fouled”. Therefore, all unnecessary movement in the area by troops, police or civilians must be rigidly controlled until the dog has picked up the scent. Dogs may be transported by helicopters as the animals travel well and do not suffer any discomfort. The following points should be remembered:

- a. The down draft from the helicopter can very easily destroy any scent. Hence, the helicopter should not fly low over a known, or suspected, trail.
- b. When a dog is tracking, the presence of a helicopter flying nearby often distracts the animal and so the aircraft should be kept well away.

Use of Aircraft for Tracking. Light aircraft and /or helicopters can be of great assistance to patrols in tracking gangs of insurgents. It is essential that the insurgents are kept on the move by the ground forces as a stationary man, under even light cover, is difficult to spot from the air. Patrol leaders should also remember that helicopter noise can break security and indicate to the terrorists what the Security Forces are planning.

HINTS ON TRAILS AND TRACKING

General. It is extremely difficult to move silently and quickly in most parts of the Rhodesian bush and consequently this requires much practice and concentration.

There are many paths in the bush made by game during their nightly or seasonal movements. These animals avoid steep or slippery slopes and therefore game paths will normally provide easy going. Insurgents and our own patrols use these trails when quick, silent movement is required. Troops should exercise extreme caution when using these trails as Security Forces might well be ambushed.

There are two distinct types of spoor; ground spoor and aerial spoor. The ground sign is normally made by a boot or foot print and aerial spoor is in the form of trampled grass, broken bushes, broken cobwebs, etc.

Man. Barefoot prints are soft, rounded impressions formed by the heel, ball of the foot or toes. Women's tracks are generally smaller and usually have two characteristics; firstly, they tend to be pigeon-toed and, secondly, their toes are more splayed out than the males.

Animals. As most animals have cloven hooves, the impressions formed on the ground have sharp, clear cut edges.

Tracking

The following are signs that the experienced tracker seeks when following spoor:

- a. Crushed and bent grass and vegetation.
- b. Broken twigs and leaves.
- c. Overturned leaves.
- d. Mud displaced from streams.
- e. Broken cobwebs.
- f. The state of the dew on a trail.
- g. Mud or scratches on stones and logs.

Running men. Points to observe are skid marks, depth of impression, running on balls of feet and toes, splayed out toes and badly damaged vegetation with resultant lack of concealment of the trail.

Loaded men. Short footsteps, deeper impressions than normal in soft ground, toes splayed out.

Judging the Age of Tracks.

- a. Weather. The state of the weather rain, wind, sunshine should always be on one's mind as it is one of the most important points in deciding the age of a track.
- b. Vegetation. The state and position of trodden vegetation; various grasses have different grades of resilience and only practice and experience can enable a tracker to use this factor to accurately judge the age of the spoor.
- c. Impression in mud. Always note the state of dryness of a track in mud or soft ground. If the track is very fresh, water will not have run back into the depression made by a foot. The water will run back later and later still the mud pushed up around the depression and kicked forward by the foot leaving the ground will begin to dry.
- d. Obliteration by rain or guti. By remembering when it last rained, more accurate judgment of the age of tracks is possible. If the tracks are pockmarked, they were obviously made before the rain and, if not pock-marked, they were made after the rain. Similarly, by looking to see if the tracks have been pock-marked by guti dripping from trees, the age can be established.
- e. Bent Grass or Leaves. An indication of the age of a track may be gained by the state of dryness of the bent grass is still green but after a few days turns a brown color. Again, the amount of sunshine and rain during the last few days should be taken into account.
- f. Game Tracks. Remember that most animals lie up during the day and move about at night. Therefore, if human prints on main forest game trails have at least a double set of animal spoor superimposed and these spoor show that the game has moved in both directions, any human prints are probably at least one night old. If the animal spoor show that game has moved in one direction only, then the human prints were probably made during the night after the game had moved down to water but before the game moved back.

Information regarding insurgents' methods of concealing tracks and camps should also be sought.

Factors affecting Tracking. There are certain factors which affect tracking:

- a. Whether the ground is hard or soft, stony or muddy.
- b. The type of country .Savannah or Mopani forest.
- c. The weather .things lack depth in overcast weather.
- d. The position of the sun relative to the direction of travel. The most suitable position is when one has to track towards the sun.
- e. The footwear of the human quarry. A distinct boot pattern is obviously easier to follow than a plain soled spoor.
- f. The extent to which other similar tracks may confuse and possibly blur the spoor.
- g. Concentration and the effects of weariness.

Things the tracker must look for:

- a. Footprints and impressions of footwear; the rhythm of the spoor or length of stride of the quarry. This is a guide to where the next footprint can be found.
- b. Trampled grass.
- c. Disturbed stones, sticks or soil. Marks in the soil where indirect pressure may have left no impression.
- d. Leaves .turned, crushed, kicked or pulled off trees. Branches and twigs bent or broken. Vegetation pushed aside and the reflection of light from grass or leaves displaced at an angle. The color of bent and broken vegetation, scratched or chipped bark.
- e. Discarded wrapping and masticated vegetation.
- f. Cobwebs broken or wiped off onto a nearby tree or bush.

- g. Urine and excrement, frequently indicated by house flies, mopani bees, yellow butterflies and, during the rains, dung beetles.
- h. Snares and traps, robbed bees nests and smoke.
- I. The state of dew on the spoor.
- J. Mud displaced from streams or mud on stones and logs.
- K. Squashed animal or insect life and whether it has been attacked by ants.

Bush Danger Signs.

- a. The Grey Loerie when disturbed will utter a loud and drawn out “g-way” call, and often follows the intruder, thus alarming the quarry or warning the tracker.
- b. The honey guide bird and ox-pecker both have the same “give away” effect on both quarry and tracker.

Conclusion

A tracker has many things to consider while tracking. He must possess certain qualities such as above average eyesight, memory, intelligence, fitness, anticipation and understanding of nature. Patience, persistence, acute observation and natural instinct are the basis of good tracking. There are times when pure instinct alone will draw a tracker in the correct direction. All units should ensure that training in Aggressive Bushcraft is maintained at the highest possible standard.

Annex to Rural Tracking Operations

Tracker Team and Patrol Formations

General

Experience gained by Rhodesian Security Forces in the past few years has resulted in basic principles on which operational units now base tracker team and patrol formations. These principles have evolved from normal border control duties, minor operations and major operations. Contacts have occurred as a result of deliberate follow-up patrolling and from chance contacts during frame-work patrolling in operations.

In all cases, the commander of the patrol decides how best to move through the particular type of country in which his patrol is operating. There are only two main patrol formations; the Single File and Open Formation, both of which adequately cater for thick bush and open country. The tracker team and normal patrol, or both if they are working together, are able to adopt these formations to cover the ground being searched and provide good protection.

Formations

Only the outline requirements can be given in the following diagrams. Each regular unit has developed its own ideas on the best detail within each formation. However, it is generally accepted that the ideal tracker team works as a four man group while patrol formations should be based on three main groups plus a control or headquarters group. Within each group actual formations adopted could vary depending on personalities in command, unit training, likes or dislikes and the type of country or terrorist confronting the members of the patrol.

The following appendices give formation details of Tracker Team, Patrol and a combination of both. Leaders should rehearse their own maneuvering in the bush using the following ideas as a guide. During rehearsals, practice or basic training, finer details can be developed to the satisfaction of all who will make practical use of the formations in actual operations.

Annex to Rural Tracking Operations Notes

- a. The four group system has, in all cases, Flank and Reserve groups with the command element located centrally. Each group could adopt any one of several formations to cover the ground efficiently. There

may even be occasions when the commander prefers to keep two thirds of his strength in reserve (one up, two back). This is the commander's prerogative and he must decide after considering all relevant factors. The size of the patrol dictates the number of men in each group; if the patrol is only four man strength, the Tracker Team Single File or Open Formation can be adopted (see A and B above). As the strength increases, so can the number of men in each group.

b. Distances between individuals will vary according to visibility, but five yards is the most convenient guide. Distance between groups is tactical but certainly within visual distance for silent signals and control.

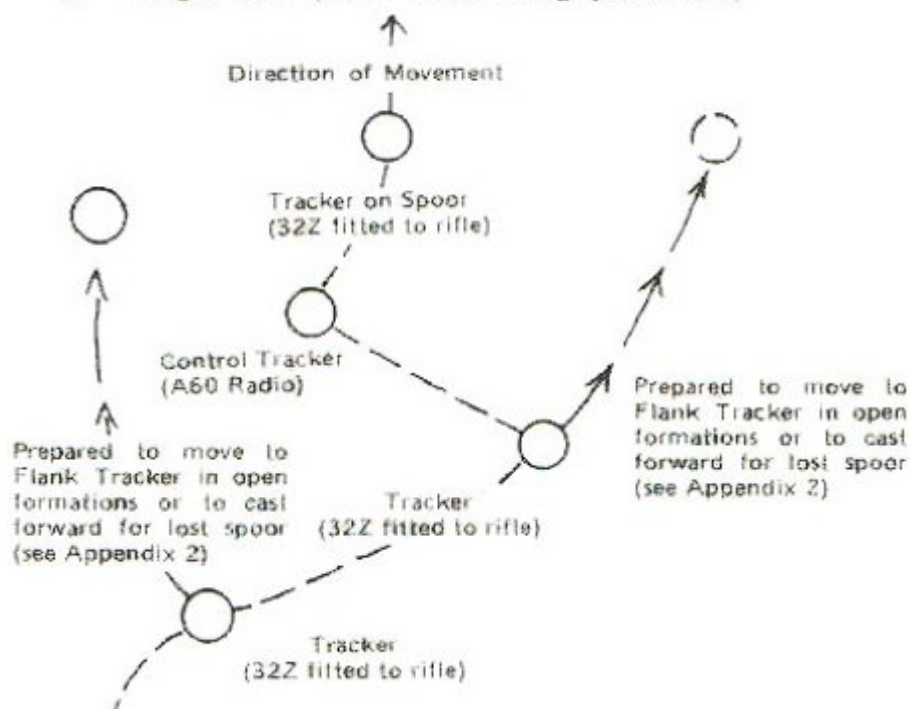
c. The patrol moves behind the trackers and must avoid interfering with the Tracker Team duties and tactics. The patrol commander commands the whole follow-up patrol, including trackers, but he should discuss formations, distances and personal preferences with the Control Tracker before moving out on a patrol. This should eliminate any misunderstandings and avoid unnecessary confusion. It will also allow coordination between trackers and patrols which may have special requirements.

d. The allocated position of patrol personnel within groups is not rigid. Each commander has his personal preferences and factors can influence this detail. The positioning of various types of fire support available is also flexible and personal preferences override any attempt to dictate rigid drills, e.g. 32Zs fitted to rifles, position of heavy barreled FNs, positioning of the MAGs or radios.

Appendix 1 to Annex

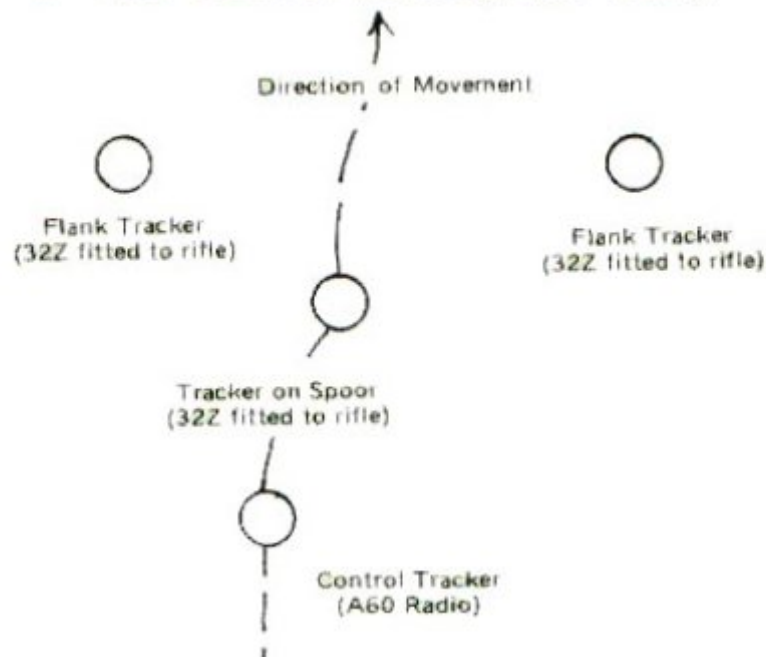
Tracker team formations

A. Single File (thick bush being penetrated)



Appendix 2 to Annex

B. Open Formation (traversing open country)



Appendix 3 to Annex

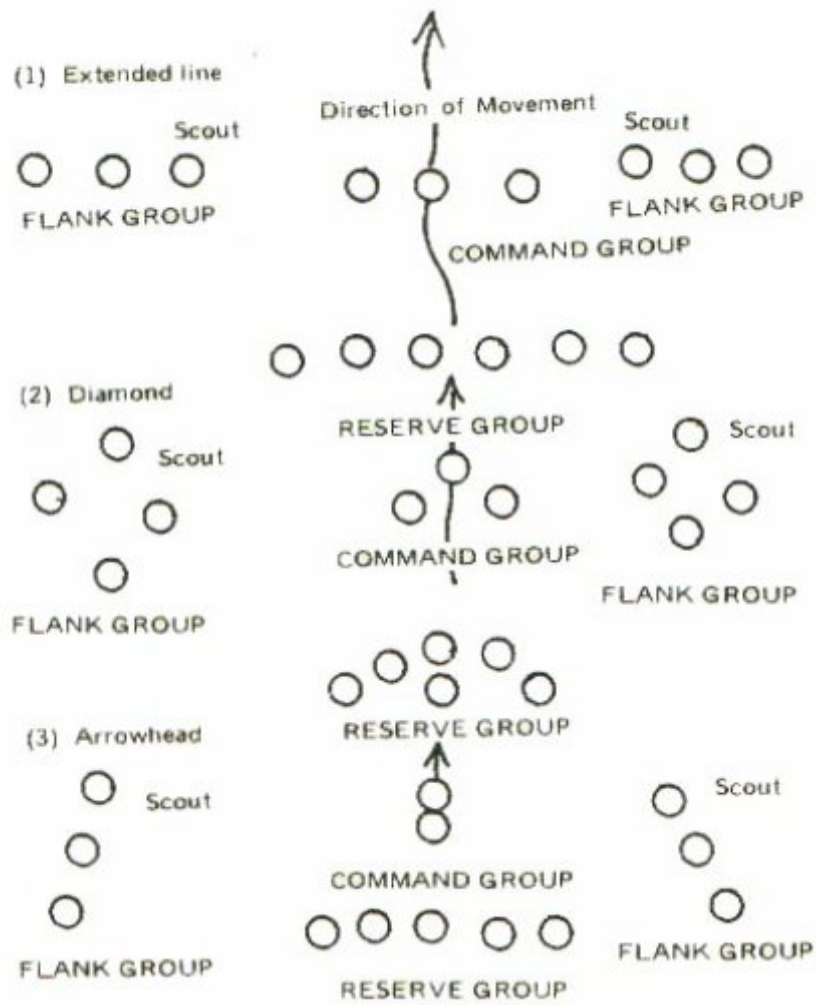
Patrol Formations (no Tracker Team attached)

C. Single File (Thick bush being penetrated)



Appendix 4 to Annex

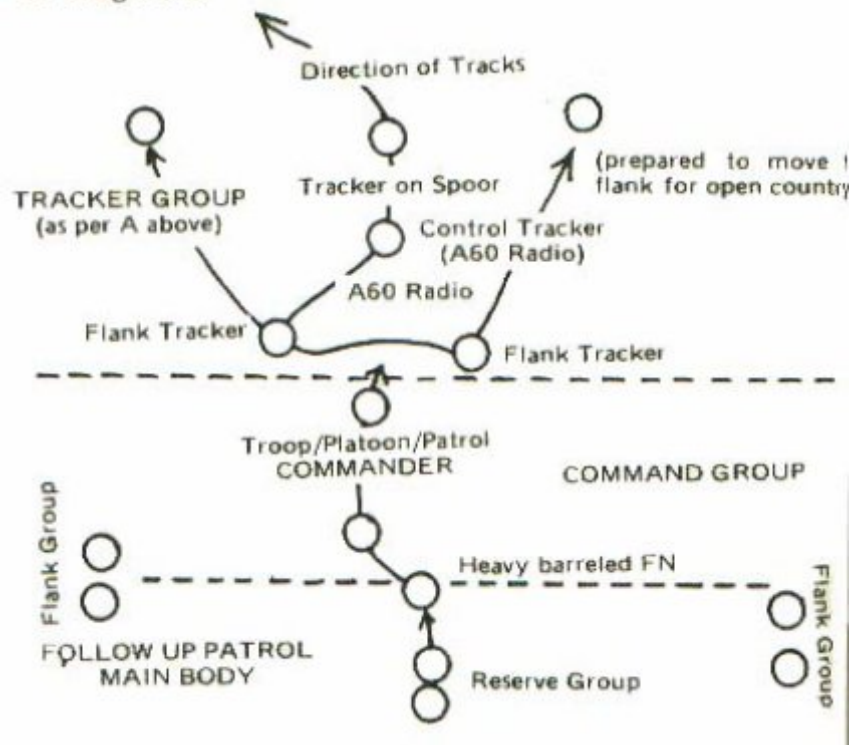
D. Open Formation (traversing open country)



Appendix 5 to Annex

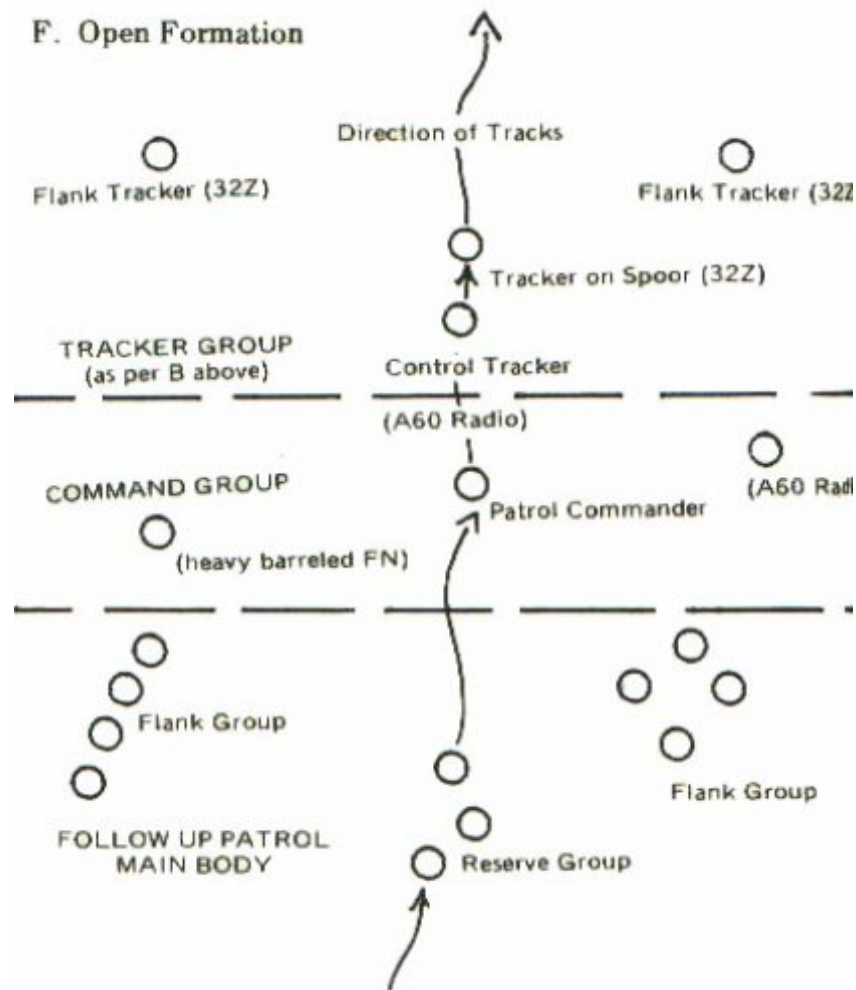
Patrol Formations (Tracker Team attached)

E. Single File



Appendix 6 to Annex

F. Open Formation



ZAMBEZI VALLEY MANHUNT

Tracker Combat Unit (TCU) Trails Terrors

By David Scott-Donelan

Rhodesia was hardly a nurturing environment for an experimental military unit. Most soldiers were concerned with simple survival, particularly in the earlier days of the country's no-holds-barred bush war against communist

guerrillas. In those times, the government's troop strength was low and resources to patrol a 1,000-mile border and 150,000 square miles of hinterland were severely limited.

But history demonstrates some of the toughest life forms spring from harsh environments. In Rhodesia, when you talked tough, you talked about the Army's Tracker Combat Unit.

From TCU's small nucleus of original members came an impressive roster of military leaders including Andre Rabie and Allan Franklin, founding members of another innovative and deadly organization, the Selous Scouts. Other original TCU members included Brian Robinson, who later commanded Rhodesia's Tracking School and Special Air Services at the height of battlefield commitment of that unit. TCU plankowner Joe Conway was decorated for tackling four terrorists while armed only with a bayonet. And 'T.C.' Woods survived an underwater battle with a crocodile, even after the man-eater chewed off one of his balls. The original members of the Tracker Combat Unit were veterans and genuine hard-cases. They had to be.

TCU soldiers also had to be innovative. They formed their unit out of not much more than a concept and an urgent necessity. Short on resources but long on initiative, the Rhodesians "waged a campaign of extreme professional competence that will deserve a place in the world's Staff College courses for many years to come," according to John Keegan's *World Armies*.



Rhodesia's problem was engaging hostile guerrillas in a large area with limited manpower. And as important a part of military field operations as it is, patrolling was often an ineffective means of contacting the enemy in the vast bush of southern Africa. Without luck or adequate military intelligence there was generally no contact, particularly if the insurgents had the assistance of the local population.

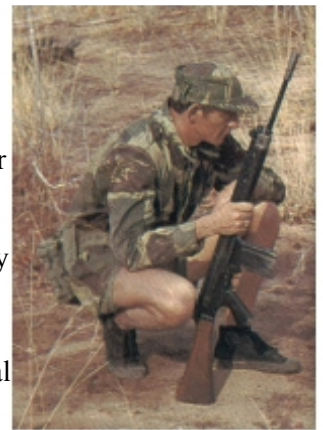
Fighting terrorists —when they could be forced to fight— was easy. Finding them is another story and the genesis of the TCU. In 1965, foreseeing the fundamental problem of covering large areas with limited troops in heat that often exceeded 110 degrees, the Rhodesian Army adopted a solution suggested by ex-game ranger turned ecologist, Allen Savory. They began experimenting with trained tracking teams which could react to any incident or reported presence of terrorist groups. That may seem simple enough. American Indians have tracked human and animal quarry for centuries and the British used Iban trackers in the Malayan Campaign. But the Rhodesians developed the basic fieldcraft into a tactical science that later accounted for the deaths of many terrorists who mistakenly thought there was no danger in leaving a track of communist-supplied boots across the African veldt.

Savory's concept took native tracking and turned it into a military discipline. He argued that a soldier already skilled in patrols, ambushes and tactical maneuvering could better almost anyone in the man tracking game once trained in the necessary techniques. From Rhodesia's SAS he selected eight men which he felt had demonstrated special potential to form a test group.

Savory put them through a Spartan, rigorous training program in the Sabie Valley adjacent to the Mozambique border. Eight weeks in the field, two weeks back in town and another eight weeks back in the bush was just enough to bring his men to what he felt was the required standard.

It was just in time. The insurgency situation projected by Rhodesian military commanders soon became a reality. In 1966 the war began with the infiltration of a combined Rhodesian and South African terrorist gang into the Wankie National Park in the northwestern corner of the country.

The Rhodesian Army made initial mistakes in reacting to the threat but field soldiers quickly learned some vital lessons. Government troops took several casualties but all 40 terrorists were killed or captured. The need to track



and locate similar guerrilla bands became obvious.

Military authorities approved the TCU as a permanent unit. Savory began looking outside the Army to avoid the charge that his priority tended to strip units of their best men. Since he'd served several years in Rhodesia's Game Department, he already knew the type of man he wanted. Over the next few months he contacted former colleagues and his fledgling unit began to take shape. He selected 12 bush veterans who were excellent marksmen and trained soldiers. TCU was officially born.



The early lessons learned by the pioneer SAS trackers were strictly applied to the vast font of bush knowledge most men brought into TCU and a rigorous training schedule was designed to teach tactical application. They began their training by tracking in pairs; one tracking the other over increasing distances.

Bushcraft and survival skills were perfected and much time was spent on jungle ranges to improve reflexes and instinctive shooting. Great care was taken to practice silent movement. All communications were by hand signals. Silent dog whistles were also employed. When blown in a certain way they produced a sound similar to that of a local beetle, recognizable to a trained ear but meaningless to the uninitiated.

Once individual tracking was learned, the trainees were introduced to team tracking. This involved a four-man team: a controller, a primary tracker and two flank trackers. The team was deployed on the spoor in a V-formation with the two guard trackers placed slightly forward and to each flank to protect the main man whose concentration would be locked onto following the spoor. The controller was placed in the rear of the team to coordinate and control tactical movement. Team members were trained in all four positions and periodically rotated to prevent fatigue.

Some of the most effective training was accomplished when one team would lay a spoor of a fairly long distance and then prepare an ambush for the tracking team. They would ambush their pursuers with slingshots. This method enabled trackers to spot likely ambush sites and also helped develop a good eye for the selection and concealment of ambush positions. A painful welt from a slingshot missile was the motivation to avoid carelessness. Longer and longer reaches were worked by TCU teams until they could hold on a spoor for several days with comparative ease.

After a training segment which taught them how to cover their own track and avoid detection, the trainees were ready for the final tactical exercise: a competition between three four-man teams. Wearing only shirts, shorts, boots and hats each team member was given rations consisting of four tea bags and a four-ounce packet of shelled rice. They were assigned a series of map coordinates to follow over a seven-day period. The exercise was planned so that routes would cross and the objective was for each team to track and hunt down the other two groups.

The rules were simple. If a team caught another team, they were allowed to confiscate anything from their prisoners. It was not unusual to see naked trackers slinking through the bush in pursuit of their confiscated uniforms. In the final phase of training, live ammunition was used to accustom trackers to the realities of combat.

Once training was completed, the TCU members returned to their homes or other duties until there was a need for their specialized services. Generally, it was not a long wait.

The first real operation for Rhodesia's TCU was in 1967. Zambian-based terrorists made a significant incursion into northern Mashonaland. Several guerrilla base camps across the Zambezi Valley floor were set up by 110 terrorists who had infiltrated Rhodesia undetected. A game ranger —David Scammel who later became a tracker team member — found their spoor while checking disturbed wildlife patterns. The newly-formed and trained TCU was mustered and given the task of locating the guerrillas. After some significant reconnaissance, an attack was mounted on the primary terrorist base camp and many of the gang were killed in the ensuing action. Some managed to escape the Army's attack, but they were not home free.



A second phase of the assault was opened including a series of pursuits by trackers. In this operation, TCU member Joe Conway tracked four guerrillas 60 miles over three days across broken terrain. The chase ended when the thoroughly demoralized terrorists raised their hands and surrendered. The captured commies complained profusely at their Rhodesian government trial about having been tracked down like wild animals. Conway and the other TCU trackers just beamed at that.

In December 1969, the terrorists struck again in attacks on Victoria Falls Airport and a police base while using explosives to cut the Rhodesian/Zambian rail line. Within eight hours, two TCU teams were on the trail and they discovered that 22 guerrillas had been involved in the three-pronged strike. Before they could run the terrors to ground, a heavy thunderstorm washed away the spoor. Several days later, after police found suspicious tracks, a second TCU team was choppered in to investigate. They followed the trail for several miles to a place where a deliberate effort had been made to obliterate the tracks.

The spoor seemed to be the same one that had been washed out earlier and indications were that the terrorists had moved into a heavily wooded ravine. The TCU members skirmished forward. Not 30 yards into the bush, one tracker found a Russian-made pack hastily concealed in a hole. A thorough search of the area revealed 22 sleeping spaces and 20 more packs containing ammunition, grenades, food and clothing. The signs clearly indicated the terrorists had fled when they discovered skilled trackers were on their trail. Despite the lack of contact, the TCU had managed a victory. The guerrillas lost their base camp and were forced to split into smaller groups which made them vulnerable to Rhodesian patrols.

More heavy rains prevented the TCU from staying on the track but at first light the next morning an Army patrol discovered fresh spoor and called the unit into action. The trail appeared to be leading to an abandoned stone quarry several miles away which was a likely location of a terrorist rendezvous. A TCU team was inserted along the anticipated route and they quickly spotted three terrorists squatting under a tree to escape the rain. Using their bush skills, the TCU members crept to within 20 yards, and counted coup: three shots, three confirmed terr KIAs. The entire guerrilla unit was ultimately located and liquidated.

The TCU was involved in virtually every incident of insurgent infiltration over the next few years. Hundreds of successful pursuits were launched based on TCU information and intelligence. Large numbers of terrorists were killed with only one TCU combat death.

In one of the world's classic military ironies, the TCU's success ultimately led to the unit's demise. The tactics and techniques which the Tracker Combat Unit pioneered and proved led the Rhodesian government to decide that similar training should be mandated throughout the Army. As a first step, the TCU was ordered into the ranks of the Selous Scouts while some veterans were seconded off to form Rhodesia's widely-acclaimed Tracking and Bushcraft School on the shores of Lake Kariba (the famed Wafa Wafa).

Hundreds of soldiers, both black and white, were trained there, including several from friendly Western countries. Much of the Rhodesian Army's success against insurgents from the Zimbabwe African National Union (ZANU) and the Zimbabwe People's Revolutionary Army (ZIPRA) can be directly attributed to the school and Allen Savory's foresight and wisdom.



TERR TRACKER

This was Capt. David Scott-Donelan first appearance in SOF magazine. Scott currently owns and runs the Tactical Tracking Operations School (TTOS) in United States. His military service spans two-and-a-half decades and several countries. From 1961 until 1980, when the government was turned over to Marxist insurgents, he served in Rhodesia's most outstanding military units, including the Special Air Service, the Rhodesian Light Infantry, the Selous Scouts and the Tracker Combat Unit. Among other duties, the British citizen has served as an SAS troop commander, intelligence advisor, manager of counter-insurgency operations, commandant of the

Rhodesian Army Bushcraft and Tracking School. and as a training officer and group commander for the Selous Scouts.

TRACKING FOR SURVIVAL



As a Scout, your knowledge of tracking will enhance your awareness, increase your ability to gather intelligence, and sharpen your bushcraft. If you are in command during extended border operations, a tracking capability will enable you to build an accurate map of the localized enemy movement without having to send out large amounts of patrols.

Good trackers are rare. When they are needed for military purposes, commanders usually employ hunters from the local indigenous population. But this does not mean that soldiers cannot track; some of them are among the world's best trackers. A tracker is a reader of 'sign'. He takes a few faint pieces of information and, by the process of deduction and comparison with previous experience, puts the puzzle together.

The more experience the tracker has, the better able he is to do the job. But he must still beware the following:

1 Lack of confidence

Even the best trackers use intuition, and a tracker must know when to trust a hunch. With lives at stake, lack of confidence can cloud your ability to think straight. Experience is the only solution.

2 Bad weather

'Sign' does not last for ever. Wind, rain and fresh snowfall will all obliterate it: many a trail has gone cold because the tracker has not paid enough attention to the weather forecast. With unfavorable weather imminent, short cuts may need to be taken to speed the 'follow-up'.

3 Non-track conscious personnel

By the time trackers are called in to follow a trail, the clues at the proposed start have usually been destroyed by clumsy feet. If you are fortunate enough to work with a team that can recognize 'sign', even though they cannot read it, you will have extra pairs of eyes to help you find the vital clues.

4 Unsympathetic commander

Tracking is a solitary business, requiring great concentration. A tracker must have the trust of the commander, and must be able to trust his cover group. Tracking often seems to be painfully slow, but the tracker will be moving as fast as he can: never rush him. The more intelligence he has at his disposal, the better, so tell him what is going on: your knowledge of enemy movement may make sense of an otherwise meaningless clue.

Try to allow the tracker time to impart a rudimentary knowledge of tracking to his cover group, and make sure the cover group are all patient men: the tracker has the challenge of the trail to hold his attention, but the cover and support group does not. If they make any noise, it is the tracker who is at greatest risk.

Learning to track

Tracking is not a particularly difficult skill to learn, but it needs dedication and much practice. Once you have learned the basic principles and techniques you can practice in your own time. If you want to reach a high standard, it will help if you have a team mate who can lay trails for you. Make sure you keep a log: this must include the duration of the track, the time of the day, the ground conditions, and the level of difficulty.

Teaching yourself is not easy. The biggest mistake you can make is to ‘run before you can walk’: for at least your first 50 hours, follow simple trails, concentrating on accurately interpreting the ‘sign’. Then gradually increase the difficulty of the trails. When you have 100 hours under your belt, you should be following fairly difficult trails.

Becoming sign-conscious

The first skill of a tracker is the most important one you will learn: becoming sign-conscious. There is no quick way to achieve this. As you go about your everyday business, try to notice footprints, tracks, fingerprints, hair and other signs.

At first this will be a contrived activity, but with perseverance you will begin to notice these fine details in the overall pattern around you without thinking about it. When this happens, you are ready to start tracking.

Reading ‘sign’

You’re unlikely ever to find a string of ‘Man Friday’ footprints. Instead you will have to follow a trail of scuffs, creased leaves, bruised grass stems, hairs and occasionally part of a footprint.

If you are lucky enough to find a clear print, study it carefully to glean as much information as possible about the target. Compare it with your own to determine the target’s size, sex, age, weight (load or no load), speed of travel, and whether he is fit or exhausted.

You must also be able to read animal signs, even when tracking people. For example, a human track with a badger print on top of it will show that the track was made before the badger was active at night. If you know the habits of the local wildlife, you will have gained a clue to the age of the track.

Animal tracks may also lead you to a rubbish or food cache, providing you with crucial information regarding the target’s state of mental, moral and physical well-being.

Attributes of a tracker

Tracking is mainly a visual skill. Your eyesight, whether you wear glasses or not, must be 20/20. Shortsighted people often seem to make good trackers once their eyesight is corrected.

A general ability to observe is not enough for tracking: you have to piece information together, like Sherlock Holmes. You must also be patient, persistent and constantly questioning your own theories, especially if you are ‘solo tracking’.

Very often, you will trail your target to within touching distance. To reduce risks, self-defense and close-quarter battle skills are vital.

Although modern equipment plays an important role in the task of tracking, remember that it does not replace your tracking ability: it just makes life easier.

Clothing and equipment

A tracking team must be totally self-sufficient and capable of operating as an independent unit. Communications equipment and plenty of supplies and ammunition must be carried. Tracking can often be a slow process, so everyone must be warm, windproof and waterproof.

The tracker’s load is normally carried by the support team, leaving him with only his belt kit. Make arrangements for his kit to be dropped where he can reach it at the first sign of trouble.

Using the Light

Now that you have become more sign-conscious, you must learn to maximize your chances of seeing sign. To see the greatest detail in a clear print you need contrast: this means the light striking the ground at a low angle. Normally, this means that you are limited to tracking when the sun is low in the sky, during the morning hours and in late afternoon/early evening. Around midday the light is almost directly overhead and casts a flat light, which makes ground features disappear. However, time will usually be against you in most live tracking situations, forcing you to continue through the midday and sometimes even into the night. In this case you will need to make use of techniques that have been devised to control the light conditions to your advantage.

Daylight tracking

When the sun is low in the sky, you can take advantage of the light just by positioning yourself correctly: make sure the track is between yourself and the light source by watching the shadows cast by your tracking stick. Probably the most common error of novice trackers is to align themselves incorrectly. Once you are in the correct position, it is often an advantage to lower your line of sight, sometimes even right down to the ground. As you become more proficient you will do this mainly for seeing the finer details or when the light is bad. If you are not used to squatting on your haunches for long periods, include exercise for this in your fitness program: novice trackers on their first extended follow-up often miss sign due to a reluctance to squat down.

When you are sign-cutting (searching for sign, normally aiming to cross the target at 900), getting into the correct position relative to the sun is vital, but can pose problems. If the target is moving directly away from the sun, to ‘follow up’ you will have to look back over your shoulder. This must be practiced, as it takes some getting used to.

If you have to follow up through the mid-day period, you will have to slow down and be more careful, which is more tiring. Ideally your commander will use several trackers and rotate them at point duty.

You may be able to gain some lighting advantage by using your torch. A torch is also the best answer when you are tracking in woodland where the light conditions can be very confusing, especially under dappled shadowing.

Night tracking

Night tracking is not always possible; it depends on the local ground conditions. Because you will be using artificial light you can precisely control the light angle. Wherever possible, try to position your light source low and with the track between yourself and the light. A torch with a variable focus beam can be advantage. If you are using vehicles on dirt roads fit them with tracking lights, set to point sideways, creating contrast lighting.

Night tracking should play an important part in your training program as it helps to reinforce your use of light and enhances your ability to notice sign. Study clear prints as well as faint sign, and experiment with the light angle and beam focus until you feel you have the correct combination.

At night your ability is severely handicapped by the change of colors to monochrome. In tactical situations follow-ups usually only continue at night when a life is at risk or there is a high probability of changing or changing weather conditions obliterating the sign.

Light is vital to the tracker. The best times to track are early morning or late afternoons, where the low angle of the sun brings up the track. It is possible to track using artificial light by securing a torch to the end of your tracking stick and holding the torch on one side of the track while you read it from the other. Here, poor lighting could result in the target being lost. This position is known as the LPC (last point of contact).

Tracking on a slope

Many novice trackers fail to notice that the ground conditions are changing from flat to slope because they are too wrapped up in the sign: even the very gentlest slope will dramatically affect the lighting conditions, sometimes not. There is little you can do except to be aware of the situation.

Moisture can often make tracking easy. Dew that collects on surfaces, particularly plant foliage, will normally reflect light well. Places where a target has stepped will usually show as dark patches if he flattened down the vegetation before the dew settled, because the light will reflect off these patches at a different angle from the surrounding vegetation. However, if he passed by after the dew settled it will have been wiped off the vegetation.

On hard, flat surfaces such as rock, moisture can reveal the prints of the target as light patches. The dust on the surface will darken with moisture, but he will have removed dust by treading and so the moisture will not collect so easily.

Remember, don't just watch the ground. Sign can be left by any part of the body: for instance moisture missing on a shrub may give you an accurate indication of the target's height.

Tracking by feel

You will usually be tracking by sight, but you may find yourself in situations when a track cannot be seen — although this does not mean that it can't be detected.

A track in short grass is an example. When a foot treads on grass, the grass is flattened and sometimes broken, bruised or torn. Greater damage is caused when the target is traveling at speed or under a load. If not too badly damaged, the grass slowly recovers, to stand upright again. The time it takes for the grass to untangle itself and recover will depend on the local weather conditions and the variety of grass. It does not usually take long for the track to become invisible to the eye, but some blades of grass will remain depressed.

By very light and careful probing with the tips of your two little fingers, you will be able to detect these blades of grass by a resistance to your probing. Compare this with the surrounding area. With care, you should be able to discern the overall shape of the track.

Tracking through low cover

Tracking through low cover requires attention to detail at two levels: the ground, for vegetation crushed and disturbed by the feet, and waist height for damage caused by the equipment the target is carrying.

Other signs

Do not make the mistake of looking only at the ground. Search also for other signs such as bruised vegetation, scuffed roots, broken cobwebs, pebbles turned to expose their darker, damp underside, and the smallest of details such as grains of sand deposited on large pebbles by the target's boot.

To become a successful tracker you must pay attention to all of these factors all of the time. These signs combine with the tracks to fill in the missing details in the mental picture you are building of your target. In a tactical situation, your life and those of your teammates may depend on your noticing a few grains of sand.

ADVANCE TRACKING TECHNIQUES

Tracking involves more than just following a string of clues. You must constantly update and enhance your mental picture of the target until you can begin to predict his next move. This skill needs great concentration and attention to detail, and comes only with many hundreds of hours' practice.

If you have been practicing the techniques already shown, you should now be following simple trails with some success. But there will still be questions: how old is the sign how do I know the target wasn't walking backwards or with his shoes tied on back to front?

To answer any such questions when you are learning to track, you must return to ideal conditions. In your mind, build a picture of how the target you are following makes tracks under many varied circumstances. You can then adapt this to the more difficult conditions you face 90 percent of the time. You will also need to experiment with the different soil and vegetation types in your locality to understand how they register the impression of a foot, and how they weather under different climatic conditions.



Reading a clear print

By now you know that clear prints are not the norm but occur sporadically along the trail, in places where the ground will accept a clear impression. These areas are known by trackers as 'track traps', and can be either natural track traps such as puddles and cowpats or man-made track traps: deliberately prepared patches of ground where the target or enemy troops have to pass or are likely to pass. Such ideal spots often contain a wealth of information, so get into the habit of using them.

The following are major features you will need to be aware of. To practice reading these signs, set yourself some problems under ideal conditions.

1 Lines of force

These show as ripples or fracture lines within the track. They radiate from the major point of contact in exactly the opposite direction to the direction of movement. The faster the target is traveling, the more force produced, the greater the lines of force, and the further back they occur. When a target is moving very fast, sprinting for example, the whole track impression can be thrown backwards, very often breaking up. Pay careful attention to these lines for both speed and direction.

2 Soil scatter

Soil is sometimes thrown out of tracks by being kicked or picked up by the foot. It is usually to be seen in front of the track, in line with the direction of travel. This is especially true of tracks in snow.

3 Risings

These are where the ground has risen outside the track in response to pressure generated within the track. They are caused by forces in a downward and horizontal direction — often sudden braking and acceleration.

4 Deep impressions

These indicate where the target has placed its whole weight within the track. Each represents a separate movement. By carrying out a comparison with your own tracks you will be able to determine whether or not the target is carrying a load. If so, and you are following the track for any length of time, you should expect to see the 'put down marks' of Bergens or rifles.

There are many more signs to learn, such as twists and slides, but these are best learned by field practice. If the target decides to employ counter-tracking procedures, it is your attention to fine details that will win the day. When a target tries something devious most trackers sense that something is wrong, and then test their hunch by studying the fine nuances in the track.

Make plaster casts

To develop this sense for detail, make plaster casts of tracks; this will teach you to notice the finest sign. As an experiment, ask a team-mate to lay some clear tracks, imagining he has come to a path junction, and briefly cannot decide which path to take, before finally choosing one. Then carefully study the tracks. You should be able to detect the indecisions as a series of fine lines around walls of the relevant tracks.

Is he walking backwards?

One of the commonest problems a tracker faces is how to tell if the target is walking backwards or has tied his shoes on back to front. The simple answer here is that a tracker does not determine the direction of travel by the direction in which the tracks are pointing; instead he reads the sign within the track to determine the direction. Regardless of which way the prints point, the direction of travel must be directly opposite to the lines of force; and this is usually corroborated by a soil scatter.

Has he changed shoes?

This is very difficult. Unless you find the signs of where the target changed his shoes, all you can do is to refer to your careful measurements of his stride and your appreciation of how he walks. If he tries to alter his gait, you may be able to detect this as an unnaturalness in the overall appearance of the trail, although this can be very difficult to determine.

If the target discovers that he is being trailed, he may take evasive action such as walking down roads, rock hopping or walking down the course of a stream. This should not pose too great a problem: cut for sign along both sides of the obstacle, and beware of a possible ambush.

Ageing

Determining the age of a set of tracks is a skill which is often neglected, even by good trackers. With practice and dedication you should be able to determine the age of a fresh track to within 15 minutes.

Tracks can last for years under the right circumstances. There are parts of the world where dinosaur tracks can be seen, perfectly preserved by fossilisation. But in general terms, a track begins to deteriorate as soon as it has been formed. The wind and other climatic factors gradually cause the prominent features to collapse until no fine detail remains: in fact, a track with very defined features, such as a heavily-soled boot, will collapse and disappear faster than the track of a smooth-soled shoe.

Tracks with well-defined features always appear to be fresher than smooth tracks. Make an impression with your thumb in the ground alongside the track so that you can see how the soil behaves.

Each soil type behaves in its own individual way, so you will need to experiment with the local soil before 'following up' a trail. Also, some soils can give a false impression of the size of the track: for example, tracks appear larger than life in sand and smaller than life in heavy clay.

Practice

Putting all this information together is actually much easier than it appears. The secret is constant practice: once you have used and learned a technique, you will never forget it.

The next stage in your training program is to go back to the beginning and practice the skills we have shown you again, but paying much greater attention to detail and constantly estimating the tracks' age.

TRACKING: THE FOLLOW UP

The rotor blades clatter above, imposing an unnatural silence on your team-mates and giving you the chance for mental preparation. As a tracker, the success or failure of the operation will be on your shoulders. You think through the devious ploys you have encountered and remember the many mistakes you made in training.

After what seems like an eternity the chopper banks. The side door slides to the rear, revealing the perfect tracking light of dawn.

The 'point of last contact'

On arrival at the PLC you will be under pressure to begin the follow up immediately. But without the correct preparation this can prove disastrous. If the track is 'very hot' (fresh), it may be feasible to follow up straight away if there are several tracking teams: while one team follows up, the other teams can gather relevant intelligence. But solo tracking without preparation is suicidal: do so only under what you judge to be exceptional circumstances.

Basic pre-follow up preparations

Time spent gathering information is never wasted. But remember that the weather will not wait for you: it is already at work, smoothing away the 'sign'.

1 Secure the vicinity of PLC

The greatest technical problem you are likely to face is finding the trail. Normally by the time you arrive, the area has been flattened by the fleet of 'friendly forces'! As soon as you get there, the PLC area and its surroundings should be made off-limits to all but the trackers and their cover groups.

2 Set up an operational HQ

Commanders using tracking teams should establish a forward support HQ, near the area of operation to reduce transportation delays. Apart from normal military considerations, the HQ must provide the following tracker support: Radio communications. Transportation, capable of inserting tracker teams ahead of the target, ideally helicopters. Photocopiers or Polaroid cameras, to distribute photos or drawing of target tracks.

3 Gather intelligence

The usual difficulty is not in finding sign, but in distinguishing your target's sign from normal disturbances. Even in remote areas paths are used regularly by the local population. The more you know about the target, the easier this task will be.

Develop close liaison with the Intelligence Officer. He will be able to give you valuable information, such as what the enemy ration wrappers look like, what footwear they use, and so on. When the operation is over you will hold a debrief to enhance the picture of the enemy.

The IO's information is invaluable, but more up-to-date information can be obtained by interviewing the troops or civilians who have had the most recent contact with the target/s. Take care: if you ask leading questions you run the risk of influencing the subject's reply. If you ask a village about jungle terrorists, for example, you should ask: "What was their footwear?" You are likely to receive an accurate answer, ranging from "none" to "jungle boots". But if you ask, "What boots were they wearing?" 'you are influencing the answer, and if they cannot remember you may even fool yourself into believing they are wearing boots.

The fast 'follow up'

As soon as possible, organize a search for the trail. If you are the only tracker, you will have to follow the trail faster than it was made. Most teams begin by dividing the tasks: one or two teams may cut for sign in a circle around the PLC, while others might cut along the edges of paths, roads or rivers in the area.

Once the trail has been found, the clock really begins to tick. With the general direction of the target's movement identified, the search teams can concentrate their effort in a narrow corridor. The team that has the trail 'tapes' their start point and begins following up.

Meanwhile, the other teams begin to cut across the search corridor some distance ahead of the follow-up team. If one of these teams discovers the trail they begin following up, and the first follow-up team leapfrogs past them to 'cut ahead'. In this way the distance between trackers and target is reduced very rapidly.

Live tracking

As you round the bend in the track, something catches your eye: there is some darkness around the base of a rock, perhaps, showing that it has been moved. Carefully examining the surrounding area, you find the trail. There is no room for mistakes now. First of all, radio in your position and the details of the trail as you see it: number the targets, speed of travel etc. HQ will be able to tell you whether your information corresponds to previous info. It may be that the enemy group have split up or joined a larger force.

Next, mark the trail using colored tape so that another tracker team will know the trail has been discovered, or so that you can easily resume tracking the next day.

Estimate the age of the trail, and keeping an eye on this factor: it will enable you to judge whether or not you are gaining ground. Your life may well hang on this thin thread of data.

From now on you must be alert to all that is going on around you. Make sure the cover group understand that they are your eyes and ears while you are concentrating on the trail. Be as silent as possible, use hand signals to communicate, and at all costs keep the radio from bursting out or crackling. Tracking is tiring, so it's not a bad idea to take a rest every 10 minutes or, better still, rotate point duty with another tracker.

As you close the distance, make sure to keep your cover group informed, otherwise they may not be alert, which will put all your lives at risk. Tracking is like reeling in a fish: you have to be careful not to move too fast. Gradually close in on the target until you establish visual contact (binoculars can be useful here), and radio in their exact location. It is here that your task will normally end, with the deployment of a fire force.

When the operation is over there will be a debrief: You may be able to shed some light on the enemy's SOP, and the tracking team will hopefully be allowed some rest. Expect no glory for tracking!

Successful tracking

It is not enough just to follow the clues left behind by the target. you must interpret those signs to gain an understanding of the targets movements so that you can predict his movements or his aim.

If the target is expecting to be tracked, he may be planning to ambush you or lay a booby-trap. Only your tracking skill can help you here. Caution, careful interpretation and a steady tracking pace are your allies: tiredness, carelessly taking signs at face value, and undue haste along the trail can be fatal enemies.

As you follow the trail, pay attention to all types of sign, not just the tracks. Stop to look around and listen every few tracking stick to help you, and make sure that the track has not been obliterated because of freak conditions. If you still cannot find the next sign, check left or right of the trail. If that doesn't work, read the pattern of the last few tracks: do they indicate any change in pace or paces: trackers are frequently shot because they spend too long looking at the ground! By looking up and studying the direction in which the target is moving you will gain a better appreciation of why the tracks are being made the way they are.

Try to pay equal attention to the ground on each side of the trail: you may detect sign that indicates the target is aware of your presence. Suspect everything. If you come across evidence such as dropped or discarded equipment, treat it as a probable booby-trap.

Try to avoid destroying the 'sign' you have just followed, and never pass beyond a sign until you can see the next sign. If you cannot find the next track, pay careful attention to the last visible sign: the lines of force should indicate where a track lies. Use your direction?

The last resort before 'cutting ahead' is to check near and far from the last sign. If you are using a tracking stick and are positioned to make the best use of available light, you will not often lose the trail. Remember: the key to successful tracking is practice.

Other uses of trackers

Trackers have a unique balance of skills and they can prove ideal scouts for raiding parties and long-range recce patrols. If they're good shots they can be first-class snipers.

In a training capacity, trackers will prove very useful in highlighting mistakes in camouflage and sloppy bushcraft, generally uplifting a whole unit's ability.

BUSH TRACKING AND COUNTERTRACKING

Trooper Reed, at point position on the patrol, was kneeling by the side of a cross-track in the thick woodland when the stick leader caught up with him He barred the way with a stick to stop the young trooper stumbling all over the 'spoor' (track), then pointed with the stick. "Four of them. Early yesterday, by the look of it; there are animal tracks coming and going over the top. Three wearing plain-soled boots and the other with car-tire sandals on. I've seen his tracks before. He was part of that band that got away from Fire force two weeks ago."

"Well, what are we waiting around for?" asked the trooper, and started off up the track.

Reed began to laugh.

"What the hell's so funny?"

"You're going the wrong way. The bastards had their boots tied on backwards."

The Selous Scouts use airborne surveillance and intelligence to gather information about the movement of terrorist bands, but they often have to fall back on the oldest of hunting skills - Tracking

You don't have to be born to it to be a good tracker. This section, based on the Rhodesian Anti-Terrorist Operations, sets out how to find tracks, read them, and follow them in an effort to come to grips with insurgents.

Common sense and careful observation

The operations usually starts with two trackers going off to left and right along a base line, and then making a wide circle around the area. When they find the track, their first action is to keep everyone else well away from it

— too much information can be lost by friendly forces trampling all over vital signs.

The trackers try to estimate the number of terrorists, the age of the spoor, and the direction they've taken. These details are relayed back to central headquarters so that it can be used with information from other sources, and so widen the overall intelligence picture.

The man who first found the track will lead the hunt that follows, and he won't give up that position until he loses the trail. Then the casting-about operation will begin again until contact is reestablished, and a new lead tracker takes over.

Trackers work in pairs whenever they can — but in silence. This is a very vulnerable operation that could easily be the subject of an ambush. Talking and smoking are not allowed, and noise must always be kept to a minimum.

The signs that a tracker looks for — footprints and broken or disturbed vegetation are the most important — tell him the direction the quarry took, their numbers, how long ago they passed, whether they were carrying loads or were empty-handed, how fast they were moving, their ages (or at least their size), their sex, and perhaps even something about their morale.

footprints

Footprints are the most important tell-tale. You can't always assume that the people you're following are walking in the direction that the toes point- they could have their boots tied on backwards (even when they're barefoot, they may be walking backwards!). But you can tell their direction of travel by checking which part of the indentation is the deepest — the deepest part shows the direction of march. The depth of the indentations will tell you whether they were carrying heavy loads or not, and so will the length of their stride. Heavily laden men take short paces.

The difference between the depths at the front and back will give you an idea of their speed — a running man, for example, leaves a deep toe print but little or nothing at the heel.

How well you'll be able to gauge the age of tracks depends a lot on weather conditions and even the time of day. Tracks in muddy ground that have no water standing in them are very fresh; soon after they're made, water will start to fall back into it.

If there has been recent rain, and you can see splatter marks inside the track marks, that's a sure sign that they date from before the rain.

If it's an animal track you're on, look for signs that animals have walked on top of the human trail you're following. Most animals move back and forth along these tracks, which usually lead from their daytime lairs to water holes, at night. If there is a double set of animal tracks, one in each direction, over the top of the human footprints, then they are at least a night old.

Disturbed vegetation

It's very difficult to move through the African bush without leaving signs. Bent and broken grass, twigs and other vegetation can tell you not only which way the enemy went, but also how long ago he passed. Bent and broken grass will stay green to start with, but will turn brown after a day or so. Harder vegetation will take longer to change color. Bear in mind that full sunlight will speed up the process, and shade will slow it down. Rain will affect the time-scale too.

Beware of ambush

If a track that has been quite distinct suddenly becomes much more difficult to follow, without any particular reason such as a change in the nature of the ground, the most likely conclusion is that the enemy has become extra careful and is preparing to go to ground, either in a lying-up place or perhaps in ambush.

If this happens, the strategy is to move in a wide circle around the area, stay downwind, and look for signs — the usual trail signs, but also human scent, the smoke from fires and cigarettes, and cooking smells. Listen hard, too, for the sound of weapons being prepared and other signs of an enemy presence.

hard going

Many factors affect the efficiency of a tracking operation. The type of ground, the character of the country, the weather and the direction of the sun (well-defined shadows help the tracker considerably), the sort of shoes the

quarry is wearing, how much other traffic there is in the area, and the alertness of the trackers, can all make the job more or less difficult.

A smart enemy will use all the features of the country he's crossing to make the tracker's job more difficult. Hard or rocky ground, streams and water courses, irregular habits, backtracking, changing shoes, even swinging from tree to tree . . . These can all throw you off the scent. Be patient. If you lose the spoor, circle around and try to pick it up again. If that doesn't work, cast a wider circle. Look for things like broken spiders' webs; any sign that someone has passed by recently.

Look out for scavenging and food gathering

The enemy has to eat. If he's not been prepared for a long operation, he'll have to try to live off the land, or else beg, steal or buy food from people he encounters. Even if local inhabitants claim that food has been stolen from them, they could be lying to protect the terrorists. Don't follow their directions without checking independently.

Surer signs are fruit trees and edible plants that have been raided, disturbed bee hives, and traps and snares. Look out for discarded foodstuff — unripe fruit doesn't fall from trees of its own accord.

Insect clues

Look out for other signs, too, like recent fire sites, and urine and excrement — which you can often spot by a gathering of flies, yellow butterflies or dung beetles. The enemy may even be stupid enough to leave food wrappers lying about.

Look for freshly turned earth, and dig down to find out if anything has been buried. Remember to preserve material intact for examination, but don't handle it with your bare fingers it may have enemy prints on it.

The advantage is yours

Remember, above all, that the enemy is bound to leave some signs of his passage, no matter how small. Fresh scratches on rock and stones or logs overturned, tiny sprays of sand or loose dry earth, any signs of disturbance can give you valuable information. Covering his tracks will cost the enemy precious time, and he knows this. If you can press him hard, he's more likely to make mistakes, but if you're in hot pursuit you may miss them. Take some time. Examine all the signs carefully.

If you have dogs to help you, your job will be considerably easier. But that is the subject of a separate section on anti-terrorist tactics.

SELOUS SCOUTS, FOXHOUNDS, BEACONS AND TRANSMITTERS



An interesting experimental foray undertaken by the Rhodesian Army's tracking unit, the Selous Scouts was that of using English foxhounds in the tactical tracking role, which was tried with little success in this case. It was suggested by a person familiar with canine abilities that a dogs might be trained to track and hunt terrorist in areas of thick bush in the same way they hunt foxes in England. When contact was made, a helicopter-borne fireforce could be deployed to finish off the job. Being innovative and progressive, the commanding officer approved the experiment and subsequently thirty imported hounds arrived for training.

Essential to the plan was to have a pack leader fitted with a locating beacon and a voice activated transmitter so that when the dogs located their prey, they would bark and activate the beacon. The fireforce standing by would be mobilized, home in on the transmission from the beacon, and engage the guerrilla group, who would be, so the plan went, cowering under the assault of thirty yapping dogs.

Although the idea was good (if a little bizarre) in theory, in practice it was a failure. The dogs responded well to training, and a “top dog” emerged to lead the pack, but when tested in the field the whole plan unraveled. Being hunting dogs with many generations of specialized breeding, the hounds, true to their instincts, preferred to follow the scent of deer and small furry animals rather than that of *Homo sapiens*. There is no doubt, however, that if this experiment had continued over a longer period of time, something more positive would have evolved.



OVERCOMING

TRACKING PROBLEMS

The security forces were similarly successful in overcoming some of the difficulties inherent in tracking small guerrilla units and bands of infiltrators through rough country in harsh climatic conditions. Within the Army, special four-man (sticks) tracking teams (Selous Scouts/TCU) were organized and trained for extended operations in the bush. The tracking teams worked in threes: one group in pursuit of the guerrillas, one following the trail backward in hopes of encountering other guerrillas or discovering a hidden arms cache or valuable insurgent documents, and one leap-frogging ahead to try to pick up the trail more quickly. The teams were supported by a larger section of troops (Fireforce), who would move forward and engage the insurgents once they were located by the trackers.

Botanists, recruited from local universities, taught the trackers how to live off the land (as the guerrillas did), recognize changes in an area's natural ecology that would indicate a guerrilla presence, and identify from broken brush or faintly trampled grass the tell-tale signs of movement. Instead of fatigues and combat boots, the trackers wore tennis shoes and shorts. Increased comfort while operating in the often intense midday heat was not the only reason for this attire. Tennis shoes made less noise than boots, were lighter, and made less of an imprint on the ground, thus making it more difficult for the trackers themselves to be tracked. Similarly, by wearing shorts, the trackers were forced to walk around the brush, rather than through it, reducing both noise and physical signs of movement. There is perhaps no better example of the Rhodesians' commonsense approach to complex problems than the special communications gear used by the trackers to maintain contact with one another: ordinary, inexpensive dog whistles. Though inaudible to the untrained human ear, the whistles were an effective means of communication. Between persons attuned to its distinctive pitch.

TRACKING TECHNIQUES FOR PREDATOR AND PREY

As the Land-Rover rounded a corner on the long, dusty road near Fort Victoria, Rhodesia (now Zimbabwe), my attention froze on a large tree lying across the road. Slamming on the brakes and counter-steering a skid, we came to rest about two meters from the obstacle. Then the ambush was sprung.

"The old tree across the road followed by an ambush trick," I thought. "Hope they forgot the Claymore! Glad they forgot the land mine!" Reacting instantly with counter fire is what saved our lives, because it had the ZANU (Zimbabwe African National Union) terrorists already fleeing before we dismounted. Honest to God, it looked like the Olympic 100-meter finals viewed from the south end of the stadium. The after action silence made it feel like the ambush never happened. After quickly reorganizing, we were happy to find no casualties. Already, only about a minute after the encounter, the enemy was hundreds of meters away — with no sign of slowing down.

Organizing ourselves into a follow-up group took only seconds, and leaving a security group to look after the vehicle, we moved out. But where to? And to do what? How could we possibly catch up with an ambush group that melted so fast into the bush? Tracking, my friends, tracking. Tracking is the skill (some call it an art) of pursuing the enemy by following the signs he leaves behind. For in their haste to flee our counter fire, they left enough clues to allow us to follow them. And follow we did. And not only follow them, but catch up with them, and kill them.

Now, how do you track? How do you read the signs the enemy leaves behind? Sign (or spoor) falls into two main categories: ground spoor and aerial spoor.

Ground Spoor, as the name implies, is sign found on the ground. Examples are footprints, disturbed earth, overturned rocks, etc. Aerial spoor is found above the ground in the form of trampled grass, broken bushes, broken cobwebs, etc. (Maybe your mother wears combat boots, but mother nature doesn't — look for any signs which nature does not make).

Upon locating tracks, we need to study them to learn at least three things:

1. Approximate number in the group.
2. Age of the spoor.
3. Direction of travel.

Determining the number in the group is accomplished as follows:

1. Measure off 30 inches (or the length of one stride) along the tracks between two points.
2. Draw two lines at right angles to the tracks at those two points.
3. Count the number of footprints between the lines — this will give you the number of people who have passed through the area.

This technique is very simple, but it only works accurately up to about 10-12 people.

Estimating the age of a footprint is a little harder. Tracks, especially human footprints, lose their sharp edges over time because of wind, rain and sunshine. Wind erodes the prints, rain washes them out and the sun dries prints that are in mud. It is especially important to consider what the weather was like over the past few days to judge the age of the spoor accurately. Has it rained recently? How much did it rain? Has it been windy?

Age of aerial spoor can be judged by the state and position of trodden vegetation. Long grass, for example, is resilient and will spring back after being walked on. Also, the juice inside the blades will make freshly trodden long grass somewhat damp. If such grass is completely dry when you come upon it, the spoor is obviously not fresh. Unfortunately, only practice and experience will teach you how to judge the age of tracks accurately.

Direction of travel is determined with a compass. However, don't be fooled into thinking that the initial line of travel won't change. It will usually take about two kilometers to accurately determine the true direction.

Now that we have recognized tracks, estimated the number of enemy, know how much of a head start they have, and know the general direction of travel, we can deal with how to *follow* tracks.

Before moving out, it is important to find an actual footprint or boot print. We call this "confirmed spoor." Aerial spoor is not confirmed spoor. Ground spoor that is not an actual print of a boot or foot, like overturned rocks, crushed leaves, etc. is not confirmed spoor either. So the rule is to start out on *confirmed* spoor. The tracker must memorize the characteristics of the prints (tread pattern, if any, and size), which he encounters so that he doesn't become confused later if he encounters a different set of tracks.

Track with your head up and look about 10 feet in front of you. New or inexperienced trackers typically look at the ground nearer their feet and tend to miss tracks farther away. This tends to slow the rate of

tracking. Remember this: You must track at a faster pace than the enemy is walking if you want to catch up with him.

Do not walk directly on the spoor, but rather to the side, so as not to obliterate it.

It is easier to track into the sun, than with it at your back. This is because the sun casts a shadow on the indentations of the boot print, making it easier to see. When tracking away from the sun, this shadow cannot be seen so what you do is to track alongside of the spoor and occasionally look over your shoulder, down at the spoor. This gives you the same view as if you were tracking into the sun.

While tracking, the tracker must be constantly alert for booby traps and possible ambush sites. If your tracking is successful, at some point you will be catching up with the enemy, and it's not a good idea to be caught off guard. Possible ambush sites should be cleared before passing near them. Examples are small hills, thick bushes, narrow defiles, etc.

Occasionally, due to the nature of the ground, time of day (tracking at noon casts little or no shadow) or tracker fatigue, the tracks will be lost. Now what?

Go to the last confirmed spoor and draw a line behind it, across the tracks. Stand behind the line, take time to survey the landscape in front of you, then ask yourself "Where would I go if I were walking along here?" Look for the logical line of advance, and then go check it out. If you find the spoor again, continue to track. If not, go back to your line and do a 360° circle. It goes like this: Using your last confirmed spoor as your starting point, walk 15 meters forward and walk in a circle around your point looking for tracks. Keep enlarging this circle until tracks are found, then continue tracking.

Sometimes, you may run out of available light at the end of the day. In this case, you have to sleep on the spoor and continue in the morning, obviously starting at first light.

The skill of tracking is valuable because a group with the ability to track and read tracks can engage enemy units that they otherwise could not. It only stands to reason, then, that an understanding of this skill will also enable them to better hide their own tracks when on patrol. And that brings us to anti-tracking — how to avoid being the *trackee*.

Though it is virtually impossible to avoid leaving spoor, certain techniques can be employed to minimize detection. The aim is to make the job of the enemy tracker as hard as possible and maybe you'll be lucky enough that your anti-tracking techniques will defeat his tracking ability. However, keep in mind there are those who can track you no matter what techniques you employ. In such cases, since you can't outwit the enemy tracker, you can buy yourself some time through deception and a consistently fast rate of march that will keep you one step ahead. Hopefully you will avoid contact until dusk, at which time he will literally have to stop dead in your tracks. You, on the other hand, continue to make tracks, but in a night march, slipping farther away in the process.

Let's look at some proven anti-tracking techniques. First, examine the sole of your boot. Vibram soles and jungle boots are a Christmas present to a good tracker. If you have no choice as to your boots, tie a sandbag over them to cover the tread pattern. A smooth sole is naturally harder to track than a cleated one. In Africa we were issued a high-topped, smooth-soled boot called "boots clandestine" and they worked very well.

Second is patrol technique. Try at every opportunity to walk on ground that is hard or rocky, double back, split into groups, change boots, or take them off and walk barefoot for a while. This can throw off, slow down or confuse a tracker, even a good one. One of the best ways to avoid being tracked is to kill the tracker! Sniper fire, a well-placed booby trap, or doing a dogleg and ambushing your own tracks will definitely take the fighting edge off a follow-up group.

Tracking and anti-tracking are skills that are difficult to learn but very much worth the effort. Practice definitely makes for proficiency. At times your patience and perseverance will be tested because you might be on tracks for days only to have them "disappear" into thin air. Learning these skills can breathe a lot of confidence into individual soldiers as it helps them.....

TRACKING TERRS / GUERRILLAS

Introduction to Visual Tracking

The Terrs will rarely stand and fight they make raids and return to their hideouts as quickly as possible. To make contact with them is difficult. One of the methods used to hunt down and kill the Terrs is by tracking. Tracking is used by Africans normally when hunting animals or finding strayed stock. Animals do not conceal their tracks and have set characteristics which, when known to the trackers, make animal hunting comparatively easy.

Tracking Terrs is very much more difficult. Realizing that the Security Forces are using African trackers to hunt them down, the Terrorist gangs are using all sorts of methods to conceal their tracks. Following the comparatively ill-defined human foot prints, as compared with the well-defined hoof-marks made by game, is difficult enough without the Terrs concealing their tracks. Therefore first-class trackers must be used. Many Africans can track, but the first-class tracker is not found in the average African. He is born, and no amount of practice and experience will make the average tracker as good as the born tracker.

The method of making contact with gangs by tracking is nevertheless very successful and every effort must be made to keep up the morale of the trackers and realize their importance in patrols. They are part of the team.

The Handling of Trackers

General

The Africans is simple, not very intelligent, but very willing if treated in the right way. Do not regard him as a slave but as an equal. You will find that most Africans have an innate respect for the White Man. This respect is easily increased or destroyed, depending on the treatment given to them.

The respect will be destroyed if familiarity is shown or they are allowed to take liberties. This does not mean that they should not be spoken to or offered cigarettes. They appreciate cheerfulness and the odd joke. They have a good sense of humor which, although not entirely similar to that of the White Man, is none the less present. They dislike being sworn at, even in fun, and cannot understand sarcasm.

Small things, such as making them stand up when spoken to, are important. They should come under the direct control of patrol commander and other members of the patrol should understand this.

The African Mentality.

It must be understood that the African has a completely different view of life and code of morals from ours. He does not think of the future, which the White Man has difficulty in understanding and finds irritating.

Morale

A high standard of morale among trackers must be maintained, and this will depend mainly on how the Europeans in the patrol behave. They like to air their troubles, and these must be listened to.

Administration

Although their physical needs are a great deal less than ours, do not disregard the African's comfort. There is a scale of clothing and rations for African trackers, and it must be ensured that they get it.

Tracking Patrols

Use of Correct Trackers- Not all trackers are of the same tribe and location. Care should therefore be taken that the trackers in operational use by battalions are from the tribes most suited to the terrain in which the battalion is located. If the tracker is a low land dweller employ him in similar terrain same for high land dwellers, also try to maintain integrity of the trackers by keeping similar tribes together.

Composition of Tracking Group in a Patrol- The ideal is a group of three trackers and one scout or bodyguard. Owing to the shortage of first-class trackers within the Command, more often only two trackers and one scout are used.

Formation Using Three Trackers- A tracker leads the patrol on the tracks which he is following. Behind the leading tracker is his bodyguard or scout, following the bodyguard at a distance. The other two trackers, one watching for tracks breaking off to the right and the other watching left. This formation is only used when time patrol is canalized in the forest, and is adapted to suit open country according to circumstances.

Formation Using Two Trackers- The formation is identical, except that only one tracker follows the bodyguard and has to watch for tracks breaking right and left.

The Bodyguard- The duty of the bodyguard is exactly the same as that of a leading scout in a normal patrol. The trackers all have their eyes to the ground and therefore cannot look out for ambushers, camps, or the enemy.

The Duty of the Trackers- The duty of the trackers is to track. They should not be made to carry heavy loads or become odd-job men. They should be trained in the use of firearms, silent signals, immediate action drills, and to pass all information to their patrol commander.

Action on Finding Tracks

Upon encountering tracks it is essential that some small time be spent in studying them, as invaluable information can be obtained, such as when the gang passed the spot, the numbers, whether they were laden (i.e. food carriers or armed members), and direction. It is also important that time spot is fixed on the map.

Summary

In tracking down Terrors, persistence, alertness, silence, and the ability to shoot straight and quickly are important. Be firm yet fair, and study your trackers for their individual peculiarities.

Trails and Tracks

Introduction

To move silently and quickly in most parts of the bush is impossible unless use is made of trails. There are a considerable number of paths in the bush, originally made by big game during their nightly or seasonal migrations. Since big game animals find difficulty in climbing or descending steep, slippery slopes it will be found that game trails are very easy going, the inclines being gentle.

Both the Terrors and our own patrols use these trails when quick, silent movement is required. Always check for Terrorist tracks when using these trails and remember that it is on these trails that ambushes are easily laid, both by security forces and the Terrors, though the latter, to date, have not taken full advantage of the opportunity offered.

Tracks on trails are inclined to be quickly obliterated by game and rain, as some trails are so wide that there is little overhead cover.

Types of Trails

Ridge Crest Trails- Formed by game along main ridges to enable movement from one part of the country to another. Usually well defined and useful for rapid movement in thick bush, but not used to a great extent by the Terrors for fear of leaving tracks on the trails used frequently by security forces.

Contour Trails- Found only in area of shallow valleys and generally join crests of ridges by following the contour round the head of the valley. Used by the Terrors considerably, to enable them to have easy routes to their camps.

Spur Trails- These follow the small spurs often found projecting from main ridges into deep valleys. Often rather vague, but are useful for crossing heavy country across the grain. Again used considerably by the Terrors.

Common Tracks

Man- Barefoot prints are soft rounded impressions formed by the heel, ball of foot, or toes. Women's tracks are generally smaller and have on the whole two characteristics. Firstly, they tend to be pigeon-toed and secondly, their toes are more splayed out than the males.

Animals- Due to the fact that most animals have cloven hooves, the impressions formed on the ground have sharp, clear-cut edges.

Tracking

The following are signs the experienced tracker looks for when tracking spoor:

- (a) Crushed and bent grass and vegetation
- (b) Broken twigs and leaves
- (c) Overturned leaves
- (d) Mud displaced from streams
- (e) Cobwebs
- (f) The state of dew on a trail
- (g) Mud or scratches on stones or logs
- (h) Moss scraped from trees

Running Men- Points to observe are skid marks, depth of impressions, running on balls of feet and toes. Splayed out toes and badly damaged vegetation with resultant lack of concealment of trail.

Loaded Men- Short footsteps, deeper impressions than normal in soft ground and toes splayed out.

Judging Age of Tracks

- (a) Weather: The state of the weather- rain, wind, sunshine- should always be recorded in one's mind as it is one of the most important points in deciding the age of a track.
- (b) Vegetation: The state and position of trodden vegetation; various grasses have different grades of resilience and only practice and experience can enable a tracker to use this factor for accurate ageing of a track.
- (c) Impressions in mud: Always note the state of dryness of a track in mud or soft ground. If the track is very fresh, water would have run back into the depression made by a foot. Later the water runs back and later still the mud which has been pushed up round the depression and the mud kicked forward by the foot leaving the ground begins to dry.
- (d) Obliteration by rain or dripping from mist: By remembering when it last rained, more accurate judgment of the age of tracks is easy. If the tracks are pockmarked, obviously they were made before the rain and if they are not pockmarked they were made after the rain. Similarly, by looking to see if the tracks have been pockmarked by mist dripping from brush, the age can be better judged.
- (e) Game tracks superimposed: Remember that most animals lie up during the day and move about at night. Therefore if human prints on main bush tracks have animal tracks superimposed, and these tracks show that the game have moved in both directions, the human prints are probably at least one night old. If the animal tracks show that game have moved only in one direction, then the human tracks were probably made during the night, after the game had moved down to salt or water but before the game moved back.
- (f) Cracks in bent grass or leaves: An indication of the age of a track may be gained by the state of dryness of these cracks. When fresh they are green, but after a few days turn a brown colour. Again the amount of sunshine and rain during the last few days should be taken into account.
- (g) Leaves covering tracks: In the bush leaves are always falling from the bushes. The number of leaves that fall depends on wind and rain. By looking at the number of leaves covering the tracks and taking into consideration the amount of wind and rain during the past few days, another indication as to the age of tracks is obtained. Remember the seasonal characteristics of your operational area; Kenya for example has no autumn; so the leaves fall from trees all the year round there.

Conclusion

A tracker has many things to consider whilst tracking. He must possess certain qualities, such as extraordinary eyesight, memory, intelligence, fitness, and understanding of Nature. Although practice and experience will make the average man a tracker, he can never be as good as the born tracker, for the real tracker is born, not made. African trackers track best in the areas in which they were born, and when moved to new areas must be given time to become used to the climatic conditions and the difference in vegetation and soils. Patience, persistence and acute observation are the basis of good tracking.

Terrorist Signs and Fieldcraft

Introduction

The Terrors have their own methods of informing members of their gangs where they have gone, or where they have hidden their food, and they also have their own warning system. These can be spotted by an alert patrol. The examples of signs given below are old and were only effective in certain areas. Signs vary from area to area and from gang to gang. Patrols should attempt to recognize new signs and pass back all information regarding these signs. The interrogation of prisoners must include the finding out of signs. The examples noted are only given as a guide as to what to expect. All signs are as inconspicuous as possible in order to conceal them from the security forces.

Direction Signs- Direction signs as below are usually found at track junctions

- (a) Bent bamboo; Bent down and pointing in the direction required. Inconspicuous as it is usually interpreted as having been done by big game.
- (b) Bamboo leaves crossed and pinned to the ground with a twig, the longest arm of the cross indicating direction.
- (c) Bamboo bent across a path indicates either ambush or warning to Terrors that the path is known to security forces.
- (d) The food cache sign- Three small holes are dug at regular distances up the middle of the path. At right angles to one of these, a hole is dug on either side of the path. These are lined up with a conspicuous tree or bamboo in which there is a gash cut. By placing a gash in the cut and sighting along the blade the direction to a food cache is obtained.
- (e) Abandoned hide- A tree near the abandoned hide is indicated by cutting off a large piece of bark. The lowest branch of the tree points in the direction of the new hide. The branch merely indicates the direction. The new hide will not be visible, but by following the indicated line, tracks leading to the new hide will be found. The new hide may be a considerable distance away.

Concealment of Tracks

- (a) Walking backwards, mainly in soft ground or dusty patches. Note that the mud flakes being kicked up are kicked up by the heel instead of the toe. The heel mark tends to be deeper than that of the ball of the foot and the feet are placed wider apart although the pace is shorter.
- (b) Walking on the edges of or astride paths.
- (c) Stepping in one another's tracks-used also to disguise numbers in a gang.
- (d) Use of streams and stream beds.
- (e) Splitting up into small groups or individuals over easy tracking ground or on nearing hideout.
- (f) Bent bamboo: Should it be necessary for a gang to cross a wide path, the last member pulls down a bamboo or bush with ample foliage to cover the tracks. This also is frequently interpreted as having been done by big game.
- (g) Walking along fallen trees, over- rocky ground, or stepping from rock to rock.
- (h) Stolen cattle: Dragging bush over trail; Splitting herds and mixing with herds of other
- (i) Other tricks:
 - (i) Tip-toeing;

- (ii) Rear man covering tracks with bamboo leaves; False tracks;
- (iv) Gang walking in each others footprints, rear man cutting off the feet of dead elephant or rhino and tying them to his feet and obliterating human footprints.

Concealment of Hideouts

The main methods used are:

- (a) Concealment of tracks leading to hideout.
- (b) Use of many devious entrance tracks.
- (c) Sighting hideout in most unlikely places. Usually close to a commanding position where the gang can lie-up during the daylight hours.

Types of Hideout

- (a) Underground ground- soil thrown into the river and the entrance concealed. In the bush these may be small and accommodate small numbers, but in Reserves are normally for only one or two men.
- (b) Caves under waterfalls- all sizes used.
- (c) Hut hideouts in Reserve-holes dug under beds capable of holding up to five men, having small concealed entrances.
- (d) Trees- often two- or three-man hides in holes amongst the roots of large trees. The shells of burnt-out trees are sometimes used as sentry boxes or observation posts.
- (e) Lie-ups where no form of construction is erected, the gang merely lying up under naturally thick cover.
- (/) Armed members of some gangs live separately from the food carriers. In many gangs the women members are segregated, and in some cases the gang leader lives close by them.

Keeping Up to Date

Tracking humans who are always trying to conceal their tracks is difficult, even for an experienced African tracker, who is more used to tracking animals. Just as the method of breaking and entering used by a burglar will often give his identity away to the Police, so the methods by which a gang conceals its tracks, and the way it establishes its hideouts, will give away the gang. Therefore it is essential that all new methods of concealing tracks be brought to the notice of your tracker, and, conversely, if he finds new methods, the information should be passed back.

Conclusion

When a patrol is sent out with trackers it is essential that the patrol commander himself has a fair knowledge of tracking. This knowledge may be more theoretical than practical but he should be able to recognize signs when pointed out to him by his trackers. As trackers will sometimes have different opinions as to what certain signs or tracks indicate, the patrol commander must have sufficient knowledge to make a final decision.

In British units language difficulties between patrol commander and trackers can be most tiresome. The good patrol commander will learn enough of the native dialect to eliminate this difficulty. Just as the trackers must be patient when tracking so must the patrol commander be patient when dealing with his trackers. The basis of successful tracking patrols is the team spirit, which lies within all the members of the patrol.