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Research By-Product

DETECTION AND AVOIDANCE OF
MINES AND BOOBYTRAPS IN SOUTH VIETNAM

Training and Tactical Procedures
of the 25th Infantry Division

Collected and Compiled by George J. Magner

March 1968

The George Washington University
HUMAN RESOURCES RESEARCH OFFICE
operating under contract with
THE DEPARTMENT OF THE ARMY

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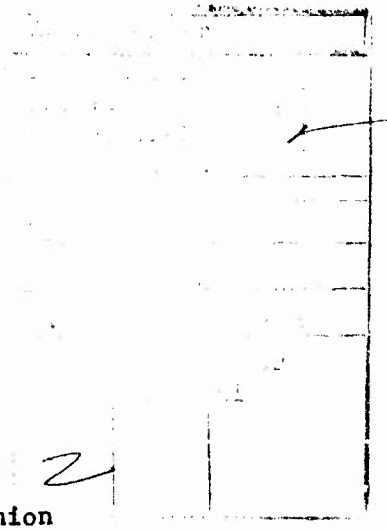

Technical Advisory Services

HumRRO Division No. 4
(Infantry)

The George Washington University
HUMAN RESOURCES RESEARCH OFFICE
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This report describes interviews conducted in a project to: (1) evaluate prevailing training methods for detecting and avoiding mines and booby traps; (2) determine training requirements, especially for minesweepers; and (3) develop recommendations for improved training. This volume provides both summaries and transcripts of interviews from the 25th Infantry Division.

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FOREWORD

In response to a requirement from the Army Concept Team in Vietnam (ACTIV), HumRRO Division No. 4 (Infantry) undertook, as a Technical Advisory Service, to assist in a project, Study and Evaluation of Countermine Activities (SECMA), proposed as a response to increased casualties from mines and boobytraps in Vietnam. HumRRO participation was designed to accomplish or assist in the accomplishment of three subtasks:

a. Evaluate present training for detection and avoidance of mines and boobytraps.

b. Determine training requirements, particularly for mine sweepers.

c. Develop recommendations for improvements in training, particularly for mine sweepers.

To accomplish the second of these objectives, a HumRRO representative conducted interviews in Vietnam during January and February 1968. Persons interviewed included engineer and infantry personnel, both officers and enlisted men. Interviews were conducted in five different major commands in Vietnam to develop a data base representative of conditions in all parts of Vietnam, and thus to provide a basis for improving training for soldiers assigned to any part of the country. The collection of data was markedly facilitated by extensive assistance provided by ACTIV, which included transportation and a project officer, which is gratefully acknowledged.

The present volume consists of transcriptions of tape-recorded interviews from one of the five major commands furnishing data. It is divided into two sections. The first section consists of interview summaries which contain the key points mentioned in each of the interviews. The second section contains the interviews themselves.

Subsequent work on this project will include analysis of quantitative data extracted from the interviews and from data forms completed by the units contacted, and the publication of a consulting report based on the findings.

This work is being done at HumRRO Division No. 4 (Infantry), Fort Benning, Georgia. The Director of Research of this Division is Dr. T. O. Jacobs. Military support for the study was provided by the U.S. Army Infantry Human Research Unit, with which HumRRO Division No. 4 is co-located. LTC Ferdinand O. Barger, Jr. was the Unit Chief at the time the research was performed.

HumRRO research is conducted under Army Contract DA 44-188-ARO-2, and under Army Project 2J024701A712 01, Training, Motivation and Leadership Research.

Meredith P. Crawford
Director
Human Resources Research Office

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SUMMARIES

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INSTRUCTION ON ORGANIZATION AND OPERATION OF A
MINE SWEEPING TEAM

This instruction was part of an eight-hour course conducted by the 2d Brigade to train selected personnel from the tactical units in the use of the mine detector. The purpose was to provide the units with the capability of supplementing engineer mine detection efforts and, when necessary, accomplishing their own mine sweeps. This period of instruction followed one that reviewed and up-dated the men's knowledge of VC mines and mining tactics. The instruction, which included a demonstration, went step by step through the organization and operation of a mine sweep team to include several special techniques. This was followed by practical work in detecting objects planted in a large field. Sufficient time was devoted to this phase to insure that the men had enough hands-on-equipment practice to gain a feel for the job of a mine sweeper.

INSTRUCTION FOR REPLACEMENTS ON EXPLOSIVE-TYPE
BOOBYTRAPS AT THE DIVISION SCHOOL

This period of instruction followed two one-hour blocks on mines and fuzes (by an EOD sergeant) and non-explosive boobytraps. The purpose of the instruction was to provide the replacements a complete picture of the various types of boobytraps used by the enemy in the division area and the methods of employment. The men were given numerous tips on how to detect the boobytraps, precautions to be taken when they were discovered, and guidance on disposing of them. The sergeant conducting the instruction was well qualified and appeared to be getting the instruction over to the replacements. Motivating factors were their impending encounters with boobytraps in combat and in the school's jungle trail which they were required to negotiate following the instruction. The instructor also reinforced the comments of the EOD sergeant in an earlier period in warning against picking up VC souvenirs and duds of any kind or leaving items in the field that could be used against us by the VC. A special warning was given on the Chicom grenade which may have an instantaneous fuze and other dangerous devices. The VC use of cans and other local materials was also stressed.

A TACTICAL WALL OF A BOOBYTRAP COURSE
WHICH REPLACEMENTS GO THROUGH FOLLOWING INSTRUCTIONAL PERIODS

This boobytrap course had several lanes through a wooded area that were liberally salted with many of the types of initiating devices that were covered in the earlier instructional periods. The replacements were broken down into squad-size groups and moved tactically through the paths to detect or avoid the concealed items. An instructor accompanied each group and rotated point men as items were either detected or tripped. The fiendish ability of the personnel that set up the course easily equaled that of the VC. Often while avoiding an obvious boobytrap other concealed items were exploded. Small explosions, or colored smoke would usually inform the replacements of their mistakes. A particularly difficult item to detect was a serrated can lid placed over another lid with a leaf in between. This was concealed in the path and was seldom detected until a man in the column had stepped on it. This caused the serrated projections of the top can lid to cut through the leaf and make contact with the lower can lid to complete a circuit causing an explosion. This type of device and the thin trip wires concealed in the heavy brush emphasized the need for alertness at all times.

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INTERVIEW WITH EOD INSTRUCTOR AT THE
DIVISION REPLACEMENT SCHOOL

The EOD sergeant had been in this line of work for some time and also had considerable experience in Vietnam. He was not only well qualified in his field but appeared to be highly motivated in passing on information that would save lives. His feeling was that the GI's curiosity and lack of respect for duds were the cause of much of his trouble. He stressed leaving the handling of these items to the experts and requested accurate reports to EOD from the finders. He pointed out that most of the VC explosives were of U.S. origin and that good supply discipline could stop some of this.

INTERVIEW WITH THE 1ST PLATOON LEADER
OF COMPANY A, 65TH ENGINEER BATTALION

In this interview a young Second Lieutenant described a recent mine sweeping experience of his platoon and provided some general information on the mines and boobytrap problem. They had found three antitank mines and he described the circumstances and his sweep teams' method of operation. He mentioned that men often swept for much longer periods then the 20 minutes recommended with no apparent bad effects. Also, the tactical unit waiting to use the road often puts pressure on them to hurry the sweeping. He remembered very little from his officer basic course at Belvoir that was oriented toward Vietnam mines and boobytraps, and although he did have classes on the use of the mine detector, there was little practical work.

INTERVIEW WITH A CAPTAIN AND THREE SERGEANTS
FROM A CO., 65th ENGINEER BATTALION FOLLOWED BY
AN INTERVIEW WITH A SP/4 MINE SWEEPER

This interview appeared to be particularly valuable due to the experience in mines and boobytrap problems of the men interviewed, the company commander, 1st Sergeant, two platoon sergeants, and a veteran SP/4 mine sweeper. Among the highlights of the interview, it was noted that 31 of 86 casualties in this engineer company had been from mines and boobytraps, with 25 being from mines and 6 from boobytraps. Primary casualty producers mentioned were Chicom or U.S. grenades and command detonated ordnance. Most of the casualties (80%) were suffered on search and destroy operations, while the balance were suffered while clearing the roads or using them. Fuzes used by the enemy were 80% instantaneous, and 20% delay. Initiating actions reported were 60% pull, 25% pressure, 2% electrical, and the rest miscellaneous. The primary means of detection was visual in a search and destroy operation, and with a mine detector in a road clearing action. The tactical conditions often provided a clue that mines or boobytraps were in the area. Means used to detect command detonated mines were grappling hooks, visual check for wires, and extra care in logical spots. No night detection efforts were reported. Normal procedure when a mine was discovered was to mark it, pass the word back, report to higher headquarters, and blow it in place. Mines and boobytraps were only rarely marked and by-passed, though it was felt that a better intelligence reporting system should exist for those that were, in order that other engineer units could learn of them in the event they had to operate in the same area at a later date.

Training of personnel on mines and boobytraps was considered inadequate on their arrival in Vietnam and almost all subsequent training on mine detectors was conducted by the unit on an On-the-Job Training (OJT) basis. There was a strong recommendation for less conventional Land Mine Warfare training in CONUS, and more Vietnam oriented training, to include more practical work with the mine detector in a realistic environment. A refresher course for NCO's and officers on engineer problems in Vietnam was also suggested. Additional training on arrival in country and periodic refresher courses were also considered desirable.

Many suggestions were also made to improve the engineer equipment used in mine detection. Some types of VC marking systems were mentioned. The successful use of the RC-3 liquid on roads to detect VC action was also described.

The interview with the veteran mine sweeper indicated that he felt he had insufficient Vietnam oriented mine and boobytrap training in engineer AIT and that OJT was the primary means of learning to use a mine detector. He also gave some information on sweep techniques, rates of sweeping, and problems of the sweeper. Specifically, he estimated a sweep rate of one mile per hour, with a sufficient number of sweepers to cover the road, and could sweep for almost an hour before auditory fatigue forced a rest of perhaps 20 minutes.

INTERVIEW WITH A 1LT, THREE SERGEANTS AND A SP/4
FROM THE 3D PLATOON, CO. A, 65TH ENGINEER BATTALION

This group was interviewed while in the Ho Bo Woods area participating in an operation designed to clear the vegetation and thereby destroy one of the key hiding places and base areas the enemy has been using for years. They were charged with sweeping the areas to be cleared by Rome plows and destroying any mines or boobytraps located. This was a very difficult task because the brush was very heavy. Occasionally tunnels were located and the engineers were then required to investigate and chart them, and later destroy them. Some differences were noted between the platoons' comments and those of their company but in most cases they were similar. For example, although the company's figures showed that mines were the major casualty producer in the engineer company, this platoon rates booby-traps as its biggest problem. This might be partially accounted for by the platoon's frequent requirements to accompany infantry on search and destroy operations where the infantry was primarily concerned with booby-traps. Like the company, they thought most casualties were suffered on search and destroy operations with road clearing operations next. In their opinion, instantaneous fuzes were used seventy percent of the time and delay fuzes thirty percent. Their estimated order of frequency of occurrance of initiating actions was: (1) pressure-release; (2) electrical; (3) pull-type; and (4) pressure. They thought most mines were detected visually and next by detectors in road clearing operations. The Rome plow and a roller device gave them some assistance in locating mines. Checking for wires and recon by fire were two methods of combatting command detonated mines. They felt that replacements fresh out of engineer AIT were not well prepared with regard to mines and boobytraps on their arrival in Vietnam and recommended more training oriented to the problems faced in Vietnam, to include more actual use of the mine detector.

INTERVIEW WITH THE COMMANDING OFFICER, S2 AND S3
OF THE 4/23d MECHANIZED INFANTRY BATTALION

This mechanized infantry battalion was charged with providing security for the large engineer clearing effort in the Ho Bo Woods area. They appeared to have devoted particular attention to the mines and boobytrap problem and had developed a number of excellent innovations such as the use of extended laterals to permit an APC to be driven from the top with greater safety from mines for the driver. This battalion was also able to provide figures on mines and boobytrap casualties, which in their case represented 50% of their total casualties. Of this amount, antivehicular and antipersonnel mines accounted for 80% and 20% were from boobytraps. They felt that their primary casualty producer is the nonmetallic antitank mine, followed by metallic tilt-rod-actuated antitank mines, boobytrapped U.S. artillery, pressure-type AT mines, CBU's and chicom grenades. Most casualties were on road clearing operations, then search and destroy operations and then wood clearing missions. In road clearing operations, most casualties are caused by mines buried in the road--some of them offset to get the APC in the belly. Then there are the mines on the road shoulders and the command-detonated types. Most other mines and boobytraps are found near VC base camps. About 80% of the VC's fuzes are instantaneous and 20% delay. Their initiating actions are usually (1) pressure release, (2) electrical, (3) pressure, and (4) pull-type. Most mines and boobytraps are detected visually; next would be by the mine detector. Dogs have been used successfully occasionally. In addition to recon by fire and grappling hooks to counteract command-detonated mines, recon by flame (flame throwing APC) and Air Force daisy cutter bombs are used. Most of the training for new men on mines and boobytraps is OJT after they reach the unit and it would help if they were better prepared when they arrive.

INTERVIEW WITH THE FIRST SERGEANT, A SP/4 AND FOUR PFC'S
OF COMPANY B, 4/23d MECHANIZED INFANTRY BATTALION

The enlisted members of this company viewed events somewhat differently than their battalion headquarters. Not having access to my figures and being influenced by their frequent task of beating the brush, their feeling that boobytraps were their biggest problem is understandable. In line with this, they felt that search and destroy operations rather than road clearing operations were the cause of most of their mine and boobytrap casualties, this also differs from the battalion's rating. They did agree that the VC used primarily instantaneous fuzes, but felt that pressure and pressure-release were the most often used initiating actions, followed by pull-type and electrical. Visual means were considered the primary method of detecting mines and boobytraps, with mine detectors next. The most frequently spotted clues were warning signs to the local people. Dogs had been used by them with good results. They felt the men should have more mine and boobytrap training in the States and that it should be given in a Vietnam-type environment and stress what to look for and where to look.

INTERVIEW WITH THE ASSISTANT S3 AND OPERATIONS SERGEANT
OF THE 1/27th INFANTRY BATTALION

As with many of the units contacted, this battalion was very busy preparing to move out on an operation. So the interview was rather hastily conducted. Being a straight infantry battalion that normally operated away from roads, their mine and boobytrap casualty estimate of 10% to 15% of total casualties was lower than most units. Of their mine and boobytrap casualties, 90% were from boobytraps and 10% from mines. This low casualty figure from mines again pointed out the difference between this type of unit and a road oriented element. Their major problem seemed to be the boobytrapped hand grenade set up in various configurations and encountered primarily on search and destroy operations. Many of them are encountered near enemy base camps in the jungle and in hedgerows. They occasionally see VC warning signs and, using special care, are able to spot some mines or boobytraps. Recon by fire has been used to counteract the command-detonated mine threat with some success. They never attempt to disarm mines or boobytraps; they always blow them in place. This is done sometimes by accompanying engineers or by demo men in the company. Following the detection or hitting of a boobytrap in an area, the men are more alert and usually find the next four or five they come to. The recommended defense against mines and boobytraps is to stay alert and stay spread out. Additional emphasis on having men go through realistic boobytrap courses in CONUS was recommended--even if it was a copy of the division's course since the repetition would help.

INTERVIEW WITH THE FIRST SERGEANT AND TWO SP/4'S
OF B COMPANY, 1/27 INFANTRY BATTALION

Again, some difference in the line units' comments compared to their battalion headquarters was noted. This group felt that 50% of their total casualties were from mines and boobytraps with 98% of them from boobytraps. Like the battalion, they felt the grenade (Chicom) represented their biggest problem, followed by the BLU-3's, command detonated U.S. ordnance and stick mines (tilt rod type). Again, punji stakes appeared to cause them little trouble. Nearly all of these were encountered in search and destroy operations. About half of them will be in the jungle, and about half near villages. They had to be especially careful of the hedgerows in the villages. Sometimes the local people will warn them, not because they care about the GI, but because they are paid if they give this kind of information. Most mines and boobytraps are detected visually, and some people in the company seem to have a special ability to find them. Also, there are signs the VC put up to warn the local people that you have to look for. Dogs have been some help in finding booby-traps. The company didn't have anyone that could operate a mine detector, and, usually used attached engineers for this. However, they had just sent three men to brigade for mine detector training. They mentioned being limited in their ability to use recon by fire to counteract command detonated mines because of the local rules when in supposedly pacified areas. Bangalore torpedoes have been used successfully to blow gaps in hedgerows and detonate mines and boobytraps in the hedgerows.

INTERVIEW WITH THE S-4 OF THE 2/14TH INFANTRY BATTALION

This officer had been in Vietnam over eleven months and had a good general knowledge of his battalion's mine and boobytrap experiences. Like most personnel from straight infantry units, he estimated that a high percentage (75% to 90%) of his battalion's casualties had been from mines and boobytraps. Over 90% of these were thought to be from boobytraps. He thought that VC-boobytrapped U.S. ordnance had been their major problem, followed by U.S. and Chicom grenades, Claymores, stick mines and BLU-3's. Almost all of their casualties from mines and boobytraps had been suffered while on search and destroy operations. They had been more fortunate in their road clearing operations, although a number of mines had been located. Mines and boobytraps were found mainly on trails or in areas the VC wanted to keep them out of, such as base camps. He reported seeing less of them in War Zone C where they had been operating recently as more NVA were moving around there now and they can't afford to boobytrap. There were marking signs for mines found occasionally and, in one instance, a number of them on the sides of a road helped locate mines. He felt strongly that the use of Chieu Hois helped tremendously in locating mines and also in training our men in what to look for. The use of Vietnam-experienced cadre was recommended as a means of improving training in CONUS. He felt that units could accomplish periodic refresher training if they were given five-day stand down periods quarterly.

INTERVIEW WITH 2ND BRIGADE COMMANDER

The brigade commander was particularly interested in the mine and boobytrap problem. He had set up a mine sweeping school which the engineers operated for selected personnel from the tactical units. He had also developed various techniques for clearing roads and preventing the VC from coming in behind the sweep teams and mining them.

INTERVIEWS

INSTRUCTION ON ORGANIZATION AND OPERATION OF A
MINE SWEEPING TEAM

In the last period, Sergeant Massey brought you up-to-date on VC mines and VC mining tactics. Now we're going to get down to the nitty-gritty of it and see a mine sweeping team in action. After we see a demonstration by a mine sweeping team, we're going to break down into six six-man teams and give each of you a chance to operate at all the positions on a mine sweeping team.

To your right front you see the demonstration team preparing to move out on a sweep. Imagine the road to your front is the northwest road running through the Ho Bo Woods. At the end of this road, the 1/27th Wolfhounds are going to be setting up their night location. These sweepers are going to sweep the road so that a resupply convoy can reach them tonight. Also imagine that there's a company to the front and to the flanks of the sweep team securing them on the way to their night location. The formation is set up in an inverted V. The point man of the mine sweeper team, the sweeper, the prober, the RTO, the NCOIC, and last but not least, the relief man. To the point and to the flank, you have the infantry security.

Before the team moves out, the NCOIC has several duties he must perform. First he checks his men to make sure they have the proper equipment. He'll ask them if they've got their bayonets and plenty of water and he'll make sure they know the mission: "We've got 3,000 meters of road to sweep for the battalion out there setting up their night location." He takes particular interest in the mine sweeper man. He watches him and puts the earphones to his head to make sure the sweeper is functioning. When he gets to his RTO, he calls the NCOIC or the OIC of the infantry security element to make sure they're well briefed on the route the mine sweep team is going to take. He'll also let them know how fast they'll be moving so the infantry can stay up with them and work off to the flanks. When the NCOIC is sure that his people are briefed and have their equipment, and the infantry security element knows where they're going, he directs the team to move out.

Notice only one man is moving, the point man. This man acts as additional security for the mine sweep team. Notice how he's looking to the right and left for trip wires coming out of the brush. He also looks for likely places for the VC to plant mines, areas where the ground's scuffed up. In his left hand he has a killer-eye (weight or hook) attached to a long piece of cord. Intermittently, he'll take this killer-eye and throw it to his front, checking for any trip wires. After he throws it out to his front, he gets down in a crouching position and pulls it in to him. This'll take care of any trip wires that are covering the road. Notice that when he throws the killer-eye out, the rest of the team also gets in a squatting positon. He is doing it slowly on purpose because this is the way you should do it. Notice that when he gets 15 to 25 meters ahead of the mine sweeper operator,

the mine detector operator moves out. It's the duty of the point man to look to his rear occasionally to make sure he's keeping 15 to 25 meters to the front of the mine sweeper. If he gets any further away, he isn't acting as part of the team; if he gets any closer, he's not providing that additional security.

The mine detector operator keeps the head of the detector three to five inches above the ground, and with each step he takes, he makes one complete sweep with the mine detector. At this stage, the operator is not wearing a helmet, but if he were wearing a helmet, he could still operate the sweeper because it will not pick up your helmet when it's on your head. This mine detector is waterproof, but we like to keep the head off the ground and out of the water unless it's absolutely necessary because, in some cases, it will short out. This operator will also switch with the last man in the column, the relief man, when he's operated 15 to 20 minutes. After you have heard that steady tone for 15 to 20 minutes, you get tone deaf.

It looks like at this time the sweeper's picked up some kind of object and the third man, the prober, will move forward. Notice that when the prober starts to work the sweeper keeps sweeping to his front and gets out of the immediate area of the prober. You'll notice also that the prober keeps his bayonet at less than a 45-degree angle to the ground at all times. He doesn't stab it and he doesn't hack it because he could set off a boobytrap or a blasting cap on top of the mine. After he's found the object the detector got a reading on, he excavates with his hand. In this case it looks like he found something, because he's calling the NCOIC forward. The NCOIC makes an evaluation of the situation, looks it over. The prober, once he's talked to the NCOIC, moves on out to the front of the mined object. The NCOIC called the demo man forward and is giving him a run down on what he's found. It looks like this time he's found a turtle mine emplanted in the road here.

When the demo man comes forward, he'll have in his demo bag previously prepared blocks of C4. He'll go up, look at it, and make sure he can put it on top of the mine. He'll put his previously prepared block on top of it. Remember, any mines the VC have can be blown with one block of C4, a time fuze, and a nonelectric blasting cap; and it sure helps if you have a fuze starter. While he's putting this charge on, the rest of the team continues sweeping to the front. When they've gotten a good safe distance beyond the mine, and after the NCOIC has notified the security what's happening, the demo man will pull the pin of the fuze starter, walk briskly back to his position on the mine sweeping team, and give out with a loud, "Fire in the hole." Once the charge has exploded, the mine sweep team continues on its mission.

The mine sweep team has found another object, it has a reading. Notice that when they stop the point man goes into the kneeling position and keeps good observation to the front. Notice also that the RTO makes himself

available to the NCOIC so he can call the security element and keep them informed of progress. The point man also keeps an eye on the security element and yells back to the rear from time to time if they're getting too far ahead or veering off to one of the flanks.

The demonstrator with the mine detector is now being relieved. He then assumes a position in the rear of the column as the relief man/demo man. Once again the team progresses.

Now, we talked about VC harassment tactics in the first block of instruction. We had intelligence reports that this road is heavily mined. Not only have the VC heavily mined it, they also have put in a lot of beer cans, soda cans, shrapnel and nails. From time to time, our team will find these. It may not give a strong reading, but each time they will stop. It's their responsibility to check out every reading they come up with. One of the reasons is that the VC use on/off switches wrapped in plastic, such as the bamboo switch you saw in the first hour. The only metal on this mine is the wire that's wrapped around the bamboo, but a good mine detector operator can pick these up.

The prober moved forward again and this time he's found a beer can. Notice the NCOIC. No matter what they find, he keeps the security element informed. This way the security can slow down when they do find things or speed up when they just get a beer can. Just now, after he threw the can away, the mine sweeper came back and rechecked that area, because oftentimes the VC will put a can or a piece of metal on top of a mine and in some cases they'll put a mine on top of a mine. If you get the first one and the sweeper keeps going, the track comes behind you and blows the second mine. So he must recheck each reading. Notice also that when he found this beer can, he threw it a good distance away, into the rice paddy. He may have to resweep this road on the way back and he doesn't want to go through all these nails and cans again.

Our team's done a pretty good job. The 1/27th has reached the night location and no tracks supporting them have hit a mine. The night location is depicted by this piece of tape here to your front. Now they'll set up here in their night location. They're getting squared away and it's starting to get dark. They've got the first track moving up to the position it's going to be for the night. It hits a mine. Two people are killed and the track's a combat loss, another $27,000. The battalion commander gives a call to his NCOIC of the mine sweep team: "We're set up here and it's too late to move to another location. Get your team together and let's sweep this area to make sure we don't have any more mines before I get my people to set up the rest of these tracks."

The NCOIC moves forward, briefs his people, and just like before, he's got his six-man team. They move out with the point man being first and still using his killer-eye. Following him, the mine sweeper operator, and then the prober. There's been one change here. You'll notice the relief/demo

man has now become the marker man as well. He's also moved from the rear of the column to the fourth place in the column. The operator of the mine sweeper waits till the point man gets a good distance to his front, it should be 15 to 25 meters, before he starts sweeping. He's got the mine detector under his arm and from time to time he'll change it from one arm to the other. This sweeper right now is clearing about a two-meter wide path through the night location. Now the fourth man, marker and demo/relief man, anchors the white engineer tape just inside the safety span of the mine sweeper. He keeps a good eye on the sweeper as it progresses, making sure he stays just inside that cleared area. He keeps a pocket full of nails and if there's wind or to make sure people don't stumble over it, from time to time he anchors the tape to the ground. The area to the left of the tape acts as a cleared area.

Normally they would not be this bunched up and they would make a large arc as they swept around to come back through the area they want to set up in for the night. The point man waits till all of the team have gotten out of this first lane before he starts back up on the second lane. They go through all phases of the sweep and from time to time you'll see him report to the people on his team. The prober has his arms void of all jewelry and watches and you'll notice that when he comes up to an area where they have a reading, he takes off his helmet and places it to his rear and lays his rifle against the top of his helmet. If he bent over a mine with his weapon strapped to his back, it is possible that his weapon could go on over and activate the mine. Once the second lane is started, the marker/relief/demo man once again anchors the tape, this time on his right flank, keeping it just inside the secured area.

Looks like they've got another reading. The point man is down on all fours keeping good observation to his front. Notice once again the prober with his bayonet at less than a 45-degree angle and the NCOIC keeping the people informed on what's happening. The mine sweeper rechecks the area. This time he found just a nail.

The marker man has laid tape all the way up to this night location. He goes back and takes up the middle strips of tape and what you have left is a piece of tape on the far end and a piece of tape on the near end, between which you have your cleared night location.

After completing the sweep, the NCOIC calls up and lets the battalion know that their night location is cleared. If it's a good team, you can almost guarantee them there are no mines or anything in this cleared area. Being a good mine detector operator, the first thing he does when he's finished sweeping is to get his case, break his sweeper down, and put it back in the case. When you're not using it, there's only one place for the detector and that's inside that waterproof, air-tight case.

This has been one six-man team, and for a narrow road or trail, one six-man team is sufficient. A lot of times you'll want to clear a large area like

a night location or sweep a wide road. If you have enough mine detectors and the manpower available, you can work a lot faster if you use more than one team.

Here's an example of three mine detectors being used with one RTO and one NCO in charge of the three teams. Here you sacrifice an NCO and an RTO from each of these two teams and put them here so they can control the whole thing. Notice that there's 25 meters safety distance between each mine sweeper so they won't interfere with each other. Also, each team is responsible for a two-meter wide lane. On clearing a road, they can judge where the others have been and they use a little bit of overlap so that all of the road is clear.

Here we have the same three teams on a little bit narrower road with the two teams keeping 25 meters between the mine sweepers and each clearing a two-meter wide strip. The third team has dropped back and they'll recheck readings of the other sweepers. When the prober comes forward, the mine sweeper doesn't have to wait around to recheck it. He can keep moving to the front. It's this extra team's responsibility to check the areas where the front sweepers get the readings.

Here is an example of an APC that hit a mine. The man was driving it in the Ho Bo Woods by means of extended laterals. With these extended laterals, he sits on top of the APC and maneuvers it with a lateral in his hand. He lost his vision; I understand he lost a hand also; and it caused $27,000 worth of damage to the vehicle because it was a total loss. It wasn't a particularly large mine, but it did blow a large hole in the bottom and completely messed up the driver's compartment and rearranged the engine. This is what we're trying to get away from, a $27,000 loss and people killed and wounded. The best way to do this is to use mine sweeper teams to the maximum.

Now to your front in the vicinity of Marker No. 14, we've got an AT mine, an M15 high explosive antitank mine. To appreciate the force that one of these has, we're going to set it off and let you look at it yourself. Now the VC have mines that are twice, three times as big as the mine we've got out here wrapped in plastic. After you see what this thing'll do, you can just about imagine what their large mines will do. This has 22 pounds of explosives in it.

Now we'll take a short break and give you a chance to look at this damaged APC a little bit closer. In the rear of the bleachers there are some pictures of the 5th Mech and the 4/23d APC's that have hit mines in the last year. Some of them look pretty bad but it wasn't all caused by the mines. It was caused by the fuel tank rupturing, catching on fire, and setting off the ammunition inside the tracks. With each picture you can figure $27,000 and maybe a couple of guys killed and several wounded. When you finish your break, I'll sound a truck horn and we'll fall back in front

of the bleachers in your respective battalions. At that time, each of you will take the mine detector out of the case, put it together, take it apart, and put it back in the case. Then we'll break for chow and be back here in the bleachers at 1300 when we'll split down into six six-man teams. We have four lanes set up with antitank mines and also a field to your rear which we'll clear for a night location. Go ahead and take your break.

INSTRUCTION FOR REPLACEMENTS ON EXPLOSIVE-TYPE BOOBYTRAPS
AT THE DIVISION SCHOOL

An explosive-type boobytrap is a boobytrap which is designed to injure or kill an individual with the use of explosives. Here in Vietman, we Americans are not supposed to use boobytraps. However, some of the ARVN units and the training units have been using our firing devices in order to boobytrap their mines. And they say the Viet Cong have our devices and have been using them. The first thing I want to do during this period is to describe our firing devices. Remember, they do have them and are using them.

This is an M1, pull-type mine device. The firing device is issued in a card board box along with the trip wire. The firing device is made out of metal. On one end you have the percussion cap and here you have the safety pin. On the inside of the firing device you have the firing pin and firing pin spring.

Now, let's talk about the M1A1. This is the M1A1 firing device. The device itself is metal. On one end you have a safety pin and a trigger head. Right around the trigger head you have a safety pin. Along with the devices you'll get a three-pronged head that screws right into the top of the device.

The M3 is a pull-release firing device. The device will come with the trip wire. The device itself is made out of metal. On one end you have a percussion primer and inside this you have the safety pin. On this side here, you have your firing pin and the safety pin up here. This is the safety pin; the firing pin is found inside. If you pull the trip wire, the device will go off. If you attempt to cut the trip wire, it'll blow. It is a pull-release firing device.

The M5 firing device is commonly known as the "mousetrap." The body is made out of metal. On top you have a release plate. On the inside you have the firing pin and firing pin spring. Here on the side you'll have the safety pin and the hole for the safety pin. Once the safety pin is removed, it requires approximately five pounds on the release plate to hold all the parts in place. Now once the weight on the release plate is released, the device will go off. Now the release plate doesn't have to come all the way to the rear for it to go off. Once it is moved in the slightest, it will go off. Again, it requires five pounds to hold the release plate in place. Now I want you to look at this explosive-type boobytrap. It's nothing more than a wooden box.

You will have to build it yourself. On the inside, it will contain explosives and a primer. Now notice that he's using a mousetrap for his firing device. This is the firing device, the mousetrap. Attached to the yoke of the mousetrap there will be a small nail. This nail will act as the firing pin. They pull this mousetrap yoke back in the proper position and then close the lid down on the box. This pressure will hold the yoke

in place. Then they take this box and set it along the trail, or in or around a village. They're hoping that some American will discover this box, pick it up, and open it. When the man opens the box, the mousetrap yoke is no longer in place. It will fly forward, drive the nail into the bottom of the primer, and explode the powder. Don't get out on your operations and start picking up these little boxes along the trail. You bypass it or pass the info on to the company. Do not stop and pick up these small boxes and open them. There'll be one of these mousetraps inside.

Here's another one of his explosive-type boobytraps made out of a box. What he does is get a box and place explosives inside the box. The firing device consists of nothing more than a metal body, striker, springs and a safety pin. You would push up on the striker and place the safety pin right in the hole on top of the striker. The safety pin will hold the striker in place. In the other end of the metal body there will be a primer drilled right into it. Remember, on the lid is a cutaway portion. He will take this box and place it along the trail. He won't close the lid all the way down. As soon as an individual steps on the lid, it will go down and the cutaway portion will make contact with the safety pin, and push it out of the striker. Once this takes place, the striker's no longer held in place. It will fly forward and set the primer off, and the primer in turn will set the powder off. The enemy will probably place this on the trail.

This is nothing more than a small sack with some kind of explosives in it, such as the M2 tetrytol block. These sacks are very handy to carry around on operations with your C-rations, ammunition boxes, etc. All Americans try to get one of these sacks and the VC realize this. So what they'll do is actually place one up for you. However, any time you see one of these sacks hanging on the side of the road or a bridge, don't run up and grab it because it will probably be boobytrapped. He will use a pull-type firing device and a trip wire as a means to explode it. The trip wire will be tied to the pull-type firing device and the sack. Pull on the sack and it, in turn, will pull on the wire. This will set off the device and explode the bomb. On this sack, use your grappling hook and rope. By no means grab it with your hands. If you do, you're asking for trouble.

Before entering a building, always make sure you check the door very, very carefully for these pressure-type firing devices. Charlie likes to use these devices on the boobytrapsto explode them. Before you walk across this door, get down on your hands and knees and check it out very, very carefully. If you look closely, the board which is directly above the trigger head will be sitting up just a little bit higher than the rest. If you don't take this board out, as soon as someone steps on the board which is directly above the trigger head, the device and the explosive will go off. Again, Charlie likes to use these devices to boobytrap a door.

The grenade boobytrap is nothing more than a grenade with the fuze out. Now I will take the grenade fuze out and place it in one of our mousetraps, the M5. Charlie takes this and places it in an area where he knows there are troop activities. Now to hold the release plate in place, he may use a rock such as you see on the top or a piece of wood--anything that will hold the release plate in place. Charlie just waits for somebody to come into this area and disturb the weight. A lot of times on an operation a soldier will be alone. He's all frustrated and disgusted and starts kicking on something. If he kicks a rock or a piece of wood and one of these contains a mousetrap firing device, as soon as he removes the weight, booooooom. These Americans will fall. That's why I wouldn't kick anything on an operation.

How many of you men would like to take a VC weapon back to the States for a souvenir? Most of us would, but don't trade your life for a souvenir. Anytime you see a VC weapon along the trail, it will be boobytrapped. In the first place, the weapon is not worth it due to the fact that Charlie can't afford to leave equipment behind without boobytrapping that equipment. Underneath this weapon he may have a plastic mine device. Now I was told right after I got here that there was this unit on operation down in the Delta. They were moving across a rice paddy when one of the leaders saw a typewriter in the middle of it. Now he should have known a company clerk was not out in the middle of the jungle. Guess what he did? He walked over and picked the typewriter up. The typewriter was sitting on top of a grenade with a mousetrap screwed into it. Once he picked the typewriter up, the grenade went off, and underneath the typewriter the grenade was placed in a 55-gallon can of oil and gas. Now the only thing that saved the man was that when he picked up the typewriter the grenade went off but the oil and gas did not. So any time you are on an operation and you see something which is obviously out of place, a typewriter in the middle of a rice paddy is an example of that, don't pick it up. Don't do anything to that which is obviously out of place. It will be one of Charlie's boobytraps.

Don't ever try to disarm a boobytrap. This particular boobytrap is made to go one of three ways. On this end there's a pull-type firing device. In the side there is a pressure-type firing device and it is also rigged up to be command-detonated. So don't ever try to disarm a boobytrap. Either call EOD personnel or get in your demo team. Charlie will boobytrap it.

One of the most common types of boobytraps is a hand grenade. This particular grenade has a pressure-type firing device. It can be used to boobytrap a trail. The VC will take this grenade, dig a hole along a trail, place the grenade in the hole and cover it up. The pressure plate will be left above the ground. As soon as a soldier comes along and steps on the pressure plate, the grenade will go off. It can also be used to boobytrap a vehicle. For example, a VC got on the base and found one of

our vehicles with no one around it, so he dug a hole under one of the tires and placed this grenade in the hole. A soldier comes out, starts the vehicle, pulls out, the tire goes over the pressure plate, and the grenade goes off.

This grenade has a pull-type firing device. It can be used to boobytrap a trail. Place the grenade along one side of the trail, tie a trip wire to the pull ring here, run it to the other side of the trail, and secure it. After the trip wire is tripped, it will remove the safety pin and the grenade will go off.

This grenade has the safety lever secured to the body with a piece of rubber tape or a rubber band. Once the VC has the safety lever secured to the body of the grenade, the safety pin will be removed. Then he will go out some place and find one of our vehicles. If there's no one around this vehicle, he will take the top off the gas tank and drop the grenade down into the gas tank. Once this grenade has been in the gas tank for a while, what is going to take place? Exactly right, the gasoline is going to rot the rubber tape or the rubber band. It might take a day, a week, or longer. Once this takes place, the safety lever is no longer held to the side of the grenade. This means the striker is free to fly forward and set the grenade off. Any time you have a vehicle in a village or some place, don't leave that vehicle unguarded. Make sure someone is with the vehicle at all times. The VC will not move this vehicle, but given the opportunity, he will boobytrap it.

This is the shape charge explosive-type boobytrap. Any time you see one of these shape charges sitting along a trail on a tripod, get away from it in a hurry. This tripod is normally made out of bamboo, three sections of bamboo. Charlie sets them along the trail and doesn't bother to camouflage them. He's hoping that someone will discover one of them and then several others will gather around and start looking at it. If he can get a group around one of these shaped charges, he will go ahead and command-detonate it. If you do run across one of these shaped charges, don't look at it. The first one of these charges that you see in the woods, get away from it in a hurry. It is designed to be command-detonated if you get around it.

Here's one where the VC digs a hole. In the bottom of this hole there will be a small charge. If a man steps into it, he command-detonates it. Dirt will be placed in the hole except for the last six inches. On top of that he will take a board and the VC will normally attach or pin grenades to it. He will drive two nails right down beside the grenade fuze. The nail will actually hold the safety lever in place. Once he has these grenades secured to the board with the nails, he will remove the safety pin. Also, before he uses the grenades he will remove the delay element. There'll be no delay element in the grenade. He will not put any camouflage on top of this boobytrap. He wants someone to locate the trap. If he can get a group of soldiers around this trap, he will command-detonate it. He will throw

the board and grenade up into the air. As soon as the grenade is thrown into the air it will come free of the board. Once this takes place, it will go off immediately, since there is no delay element in this grenade. Any time you see one of these grenade devices, get away from it in a hurry. Try to find the VC around who is going to command-detonate it.

Now let's take a look at this device here. It's not complicated but it will work. Old Charlie will go out and find a tree with a fork in it. He will take a long pole and place it in the trunk of the tree. Then he will take a short pole and secure it to the long pole with two strings. Also connected to the short pole will be another string going to an anchor stake. On the other end of the long pole will be a rock hanging at the end of a string. On the ground underneath this rock will be a large rock, to give a firm base. Then he takes one of our BLU/3 bomblets and places it on the rock sitting on the ground. Then he will take two trip wires and attach one trip wire to each of these strings looped around the short pole. As soon as one of these trip wires is tripped, it will pull the string looped around the short pole off. Once this is pulled off, the short pole will tip and this will allow the long pole to drop forward and the rock on the string from the long pole will drop on this BLU/3 bomblet and set it off. It's not complicated but it will work.

Charlie will also use the BLU/3 bomblet to make a boobytrap. He will remove the pin and the firing device, and then he will screw a primer into the metal body. Up top he will have a shell casing to hold a spring-loaded striker in place. He will take an ordinary shell casing, like the one you see here, push up on the striker and compress a spring behind it, and put the shell casing right over it to hold it in place. Then for a tilt rod he will use a section of bamboo. He takes this boobytrapped bomblet, sets it along the trail, and places the bamboo on top of the shell casing. Soon some soldier will come along and hit the bamboo sticking up and it will set the BLU/3 bomblet off.

This type of boobytrap is nothing more than a piece of bamboo hollowed out. On the end of the piece of bamboo he will cut out a small slit there, one small little notch. He will take a .30 calibre round, file along its base until it's very, very sensitive, and drop it down the hollow bamboo, projectile first. Then he'll take a small stick and drive a nail into one end of it, and insert this nail, head first, down into the bamboo. Also attached to the bamboo will be a rubber band. He will take this stick with the nail in it and pull it back in the rubber band to get the rubber band tight. Then he will take a bamboo tip and insert it into this cutaway portion here. It will hold the stick in place. Now he will take a trip wire, tie it to the bamboo tip, run it up the trail, and fasten it. As soon as the trip wire is tripped, it will remove the bamboo tip. Once the bamboo tip is removed, this stick with the nail in it is no longer held to the rear. The rubber band will snap forward, driving the stick with the nail into the base of the round, and the round will be set off. If the round misses the

man, this bamboo will get him. This is what I mean: this end is solid; so if the round missed the individual some of this bamboo will get him.

This is the cartridge trap-type boobytrap. The VC will drive a nail through aa board and the nail will act as a firing pin. He takes a piece of bamboo, hollows it out and places it over the nail. He will take a small-calibre round, one of ours or his, and place it down in the hollow bamboo, making sure the projectile is up. He will then dig a hole and place the device in the bottom of the hole and camouflage the top of it. It'll normally be camouflaged with bamboo slats. Some individual steps on the camouflage, breaks through into the hole, hits the projectile which will apply pressure and press the nail into the base of the round, and sets it off. The round will shoot right up into the man's foot. This is known as the foot trap. Another way they can employ this boobytrap is to place it in any hole with the projectile above the ground. The foot trap will be under the ground with the exception of the projectile. After the man steps on the projectile and applies pressure, it will set the device off.

This hollow bamboo mine is nothing more than a section of bamboo hollowed out. Inside this bamboo the VC will place explosives. These are packaged explosives like ours. Along with the explosives he'll put rocks, metal and glass. It is normally set up to be fired by a pull- or pressure-type fuze. However, it can be fired by other means. For instance, it can be command-detonated. Any time you're on an operation and you see some bamboo with a wire running from it, get away from it in a hurry. It will be one of Charlie's hollowed bamboo mines. It is used against personnel.

Something common here in Vietnam is a gate, a wall, or a fence. Equally as common is the boobytrap put on these gates by the VC. The gate can be boobytrapped very, very easily. It is normally boobytrapped with the hand grenade. The VC will take a hand grenade and put one of our own firing devices in it. He'll dig a hole near a gate and place the grenade in the hole, making sure the gate is directly above the release plate of the firing device in order to hold the release plate in place. Then he will camouflage the grenade. As soon as someone opens the gate the grenade will go off. Now there's one thing that I want to be sure to point out here: when he boobytraps the gate with a grenade, he will remove the delay element from the grenade so that the grenade will go off immediately. If there is some kind of growth around the gate, such as weeds, he'll put the grenade in the weeds, camouflage it, tie a trip wire to the safety pin of the grenade, run the trip wire back, and tie it to the gate. When a man opens the gate, it will pull the trip wire and the safety pin out of the grenade and set it off. Let's watch out for these gates.

Now for the grenade-trap boobytrap the VC can use a coke can, beer can or a C-ration can. For this trap he will use one of our M26 hand grenades. Any time you're on an operation and you finish with your cans make sure you smash them or bring them back in with you. If you don't, Charlie will

police these cans up, make explosive-type boobytraps, and use them against you. All he has to do is take one of these cans, place it in the fork of a tree or place it on a stake, drive the stake into the ground along a trail, take the safety fuze out of the grenade to remove the delay element, put the fuze back into the grenade, and place the grenade in the can. Now this can must be large enough so he can get the grenade inside it. At the same time, it must be small enough so that the can itself will hold the safety lever in place. Once he has the grenade in the can, he will remove the safety pin. He'll tie a trip wire to the grenade, run it across the trail and fasten it. When you trip the wire, it pulls the grenade out of the can, the safety lever flies off, and it goes off.

This bamboo arch boobytrap is nothing more than two bamboo poles with a grenade hanging on the side of the poles. Normally Charlie uses a horizontal trip wire, but with this boobytrap he uses a vertical trip wire. He takes that trip wire, ties it to the safety pin of the grenade, runs it down to the ground, and fastens it. There won't be any delay element in the grenade. As soon as the trip wire is hit, it will remove the safety pin and the grenade will go off. It is not designed to boobytrap tanks. It is designed to boobytrap infantry personnel riding on the outside of tanks and also infantry personnel riding on the outside of APC's. The VC will take two bamboo poles, normally fifteen feet long, sink them into the ground approximately thirty or forty feet apart, remove the delay element from two grenades and tie these grenades with these strings onto these two bamboo poles. Then he will take a trip wire and tie it onto the safety pin of the grenade. As soon as an APC comes along, the axle will strike the trip wire, remove the safety pin, and the grenade will go off. This showers fragments right down on the men on top.

Believe me, Charlie can boobytrap just about anything. He will take a loaf of bread and place a small box of explosive powder in it with a pull-type firing device. As soon as someone breaks the bread in half, or pulls on it, it will go off. Or take a bottle of beer and put a small charge of explosives inside the bottle with a pull wire. The pull wire will be connected to the bottle top. Someone attempts to open the bottle, pulls the wire, and it goes off. On this particular boobytrap, if you buy a bottle of beer and it's filled all the way to the top with beer, don't feel like you're getting a little more than anyone else, because you're probably getting more than you bargained for. Anytime that a bottle is filled all the way to the top with beer, there will normally be a small explosive with a pull-type device inside of it. Watch out for these.

The North Vietnamese fly a lot of flags, and they realize the Americans like to get these flags for souvenirs or to destroy them. What they will do is boobytrap the flagpole or the flag itself. Any time they boobytrap a flagpole, it will normally be with one of our mortar rounds or one of their mortar rounds and a tilt rod which they secure to the flagpole. The mortar round will be placed in the ground, and as soon as the flagpole

is disturbed, it tilts the rod and sets the round off. Or, the VC will take a small box of explosives and place it around the flagpole and camouflage it. They will attach a pull-type firing device to the explosives and hook it onto the flag. Someone pulls on the flag and it sets the explosives off.

Now this is one of his pressure-type firing devices. It is nothing more than two bamboo slats, and these bamboo slats each have little pieces of metal for contact points. You take two wires, tie one wire to each piece of metal, and run them back to a battery. Then you run two other wires onto the explosives. Now you will not have a complete circuit yet, but once someone steps on this bamboo or a vehicle runs over it and the two pieces of metal make contact, what is going to take place? He will have a complete circuit and it will set the explosive off. We have this particular firing device rigged up to fire. To set it off, you compress the bamboo, the metal comes in contact to make a complete circuit, and BANG it sets it off.

Also, the VC takes two boards and secures them together with nails. On one board he'll place a piece of a can. On the other board he'll have a small nail or stick. Take two wires, tie one onto the piece of can and one onto the nail, and run them back to the device. Cut into one of the wires and run two or more wires back to the explosives. When a vehicle runs on this small board, it goes down and the two pieces of metal make contact and a completed circuit will be formed. This one also works on the same principle and it is designed to boobytrap personnel. It's nothing more than a long piece of bamboo and two small sticks. You take two small sticks and punch holes through them. In these two small holes you'll insert the wires making sure the ends of the wires are bare. Take one of these small sticks and wedge it into the bottom of this bamboo. Take the other small stick and place it in the other end of the bamboo, making sure it does not go all the way down. You will hold it in place with these small sticks. Take the two wires and run them back to the batteries. Cut into one of the wires and run two other wires back to the explosives. Place the device along the trail. As soon as a man steps on this top stick here, it'll push down here and the two wires will make contact and your circuit is complete.

This is the M18A1, but I'm not up here to give you a class on the Claymore. I just want to talk about this hand generator which is used to detonate the Claymore. One of these generators comes with each Claymore weapon. Once you detonate the Claymore, don't throw this hand generator away. Charlie likes to get these hand generators because he can use them to detonate several explosive-type boobytraps. So any time you detonate your Claymore, don't throw away the hand generator. Hang onto it and bring it back with you if you don't need it. You can destroy it at your camp, but never throw it away.

Now on batteries which are used to command-detonate explosive-type boobytraps. Any time you destroy the batteries, make sure you destroy each individual cell. Don't leave any cells intact. If you do, the VC will police these cells up, hook them together, and get enough force to set off an explosive-type boobytrap.

Here's how Charlie can use a mortar round. Charlie removes the fuze of the mortar round and in its place he inserts a hand grenade fuze.

This is a C4 which Charlie may use to set off these oil mines. He will take a box and fill it full of explosives, oil and gas. For his firing device he will use our M2 fuze lighter. This is the M2 fuze lighter which is used to ignite time fuzes and safety fuzes. He will remove everything from the fuze lighter except the striker and the spring. Along the top of the striker he will file in two notches. He then places the striker back inside the spring, and the spring and striker back inside the device. Then he will take something such as a rock or one of these shell casings with the H nut on it and clamp it on top of the striker. It will hold it in place. Then he will screw in a primer, put on a tilt rod, and place them along a trail. For a tilt rod he uses a long section of bamboo and places it on the shell casing. Soon a soldier will come along and kick the bamboo, and it will set off the explosion.

Don't ever throw away your cans when you're out on an operation. Charlie will take any kind of can and make an explosive-type boobytrap. He'll pack it full of explosives, put a firing device on top, and have an explosive boobytrap. One way he can make this explosive boobytrap is to put a small apparatus in the explosive. On top is a striker and a spring. Now the striker is held in place with a small nail. There will be a trip wire tied to the nail and run across the trail. Once the trip wire is tripped it will remove this nail. When the nail is removed, the striker will fly down, hit the firing pin and set it off, and it in turn will set off the explosives. So don't throw any of your cans away.

This is a Chicom hand grenade. Take a good look at this grenade. This grenade is manufactured as a boobytrap. If you try to remove the safety pin, the grenade will go off. If you press on the safety lever the grenade will go off. There is no delay element in this grenade. It is manufactured as a boobytrap. The VC will take this grenade, put it on a trail, and hope you will come along and pick it up. Or he'll dump the grenade on tree limbs. Now if you ever see a grenade with the safety lever still in it, you usually assume it's safe. But if you try to remove the safety pin from this grenade, it will go off. If you press the grenade handle, it will go off. So don't ever pick up a Chicom hand grenade. Take a good look at this grenade and remember exactly what it looks like. Don't put any pressure on it, as that's a live grenade.

This was found in Ho Bo Woods, two C-ration cans welded together. On the inside they had explosives, rocks and glass. Now you will notice on top he has a Chicom hand grenade fuze. That's what that is, a Chicom hand grenade fuze. Again, if you pull the safety pin, the grenade will go off. Apply pressure to the safety lever and the grenade will go off. You notice the safety pin is still in place. So never pick up a Chicom hand grenade.

You guys know exactly what this is. Right, a zip gun. This zip gun wasn't found in New York City or in any large city in the United States. It was found right here in Vietnam. The VC take this zip gun out in the woods, attach it to a stake, drive the stake into the ground ready to blow. In the rear of the zip gun there will be a pull-type firing device. It is primed with about a .22 calibre round. Run a trip wire in front of the barrel. An individual moves by this, hits the trip wire, and it will set off the firing device. The firing device in turn will set off the round. Someone standing directly in front of the barrel gets hit. This shows you that the VC will use anything against you. Also, it shows you there is juvenile delinquency all over the world.

This is also found in Ho Bo Woods. It is nothing more than a can from one of our smoke grenades. On the inside they have explosives, rocks, glass, and metal. For his firing device he uses an M2 fuze lighter to the safety fuze and a non-electric blasting cap which fits on one end of the safety fuze and inserts the cap down into the can with the explosives. On the other end he places the M2 fuze lighter. This little item will be trip-wire detonated. Tie a trip wire to the pull ring here, run it across the trail, and anchor it. Soon some individual will come along the trail, hit the trip wire, and pull the safety pin. It will ignite the time fuze, burn down to the non-electric cap, and set off the charge and explosives. You can't take anything for granted when dealing with boobytraps. You must keep your guard up at all times.

A TACTICAL WALK OF A BOOBYTRAP COURSE
WHICH REPLACEMENTS GO THROUGH FOLLOWING INSTRUCTIONAL PERIODS

Q. On this first one, you say that's a pressure-type one right there in front of me?

A. It's a regular flashlight battery with a Claymore wire. You step on it and the two wires connect to make a complete circuit and set off the blasting cap.

Q. Is that a command-detonated one there?

A. Right.

Q. Now this one across the trail, how does that work?

A. Well, let's say a GI's been out on a search and destroy operation all day. He's tired and he comes along just dragging his feet and kicks the wire. It's got a pull-release device on it. Then say a VC wanted to keep you on the trail, you know, what looks like a trail, so you detour around this way. The GI detours around this way and there's a mortar round on this side.

Q. The mortar round has a pressure device to activate it?

A. Yes.

Q. How does this one work?

A. Here's our Chicom grenade hooked up to this tree with the trip wire chest high. It's got a low friction fuze on it, and a lot of times when a GI comes through, especially a tall guy, he hits it. They try to duck under it.

Q. You mean you think he'll see it and try to duck under it?

A. Right

Q. Then what happens?

A. It'll just go off if he hits it at all. It doesn't have any delay in it like our grenades. Here we have a grenade in a can anklehigh, a German type grenade. Most of the time a GI'll be on a sweep. He'll be tired and everything and he won't be able to look like he usually does. He'll be dragging his feet. He'll hit the trip wire and that'll bring the grenade out of the can. When the trip wire pulls it out, it goes right off. No delay element.

Q. What does this marking device in the trail mean?

A. Well, it means that there are boobytraps, trip wires in this area. It's so the VC can let the people in the area know that there are boobytraps. If a new VC comes in the area, they show him all the indicators and markers all over the place so that he knows there are boobytraps on the trail.

Q. So this is just a sign to the other VC to make sure they don't step on any.

A. Also, the people in the area. Here we have a punji pit and a bamboo mine. The bamboo mine is worse than the punji pit.

Q. Where's the bamboo mine? Oh, that's the one behind the brush there.

A. When the bamboo mine goes off, the bamboo is worse than the fragmentation from a grenade or mortar round. A lot of GI's know that you usually find them in a hedgerow. It's a camouflaged boobytrap.

Q. The way that bamboo mine is now, it would come all the way across the trail here when it exploded?

A. Right. Also, they plant those punji stakes by a trail. You'll be out on an operation and you get some sniper fire and the first thing you do is hit the ground. The GI hits the ground and falls on these bamboo spikes on the trail. Most Charlies will use it to their advantage.

Q. In other words, you have to hit the dirt. So you've got a choice of either standing up and getting shot or falling down and getting spiked, right?

A. When you get hit, you don't check out the area that you're falling in, you just hit the ground. On this one, somebody steps on the wire and sets it off.

Q. Like when you're going down a path and you come to a low over-hanging bush, you gotta duck down and that ducks you right into this thing?

A. Right. Mostly their web gear gets hung and sets it off.

Q. Is that an 81 mortar with a pull-type device?

A. Right, an M1 pull-type device. This is an over-hanging spike board. You do have a trip wire. It'll be in heavy underbrush or where they can camouflage it. They have vines sticking out where a GI probably couldn't see it. He hits a trip wire and it just falls down on him.

Q. This is sorta like this mace thing that you were talking about too, I guess.

A. Right. And here if there's any kind of malfunction and the whole Claymore doesn't blow, the GI just throws it away. So Charlie comes and picks it up and uses it on us again. Instead of bringing it back to the base and throwing it away, the GI throws it out in the field where the VC can get it.

This is a bear trap. The VC will have it camouflaged in the middle of the trail so that if a GI did walk in the middle of the trail, he'd step on it and activate it. The tripod marker here indicates that there will be a foot trap right down there or punji pit but mostly explosives.

Q. That's the VC sign to the local people?

A. Right. The tripod is used right over the explosives. These are indicators that say it'll be so many meters on down the trail or the road. And over there we have a steel arrow. There's a rubber band that's a piece cut off an innertube or something. The VC stole a truck and got the rubber off the innertube. What they do is insert a steel arrow inside a piece of hollow bamboo. A GI walking down a trail hits a trip wire, say the point man hits the trip wire, and somebody behind him gets the arrow.

Q. These two little crossed wires here over a can lid, is that a normal thing that they do?

A. They've been using those against the mech units.

Q. Just two little wires and a nail down there to make the contact?

A. They just take a regular flashlight battery and set it underneath a blasting cap. All they do is take the two wires, hook the naked ends and cross them. Then run it back maybe 50 or 60 feet. A tank or a vehicle comes along and hits the wire and you have a pressure device.

Q. That pulls the wires together and sets it off, right?

A. When the wires connect you get a complete circuit and that sets off the blasting cap.

INTERVIEW[1] WITH EOD INSTRUCTOR AT THE

DIVISION REPLACEMENT SCHOOL

Q. I understand that you have the first hour of a four-hour block of instruction on mines and boobytraps for replacements. What do you cover in your instruction?

A. My instruction is on the identification and characteristics of mines and boobytraps. I tell them about all the different types of explosive ordnance being used here in Vietnam. There are supposed to be about 110 different types that are of U.S., Russian, Chicom, British, French, and VC origin. We have a lot of them here that I show the men and explain how to identify. Identifying them is one of the main things I try to get across. Many times a unit will come across a dud or some type of mine or boobytrap that they will want us EOD types to come in and disarm or destroy. Now if they can identify the item, then we can be sure to bring in the right tools. We don't want to have them fooling with the thing, but just report it to us as well as they can so we can come in and take care of it.

Q. What type of items do you talk about and how do you tell them how to identify them?

A. I tell them about all the types of things they might find out there, which will be Air Force bombs, artillery and mortar rounds, rockets, rifle grenades, hand grenades and various types of land mines and boobytraps. I tell them about the shape, the size, fuzing, stabilization and anything else that will help them identify them and know how they operate.

Q. Could you give me some idea of what mines and boobytraps are found most frequently in your division's area?

A. They've found a lot of these DH-10 Chicom Claymores and several muffler-type mines recently. Another recent innovation is a CS mine, and I'm sure they got this stuff from us. The biggest problem in the area is mines in the road, and the next would be mines in these helicopter LZ's. The old butterfly bomb, the Air Force CBU, used to be our biggest problem because it had such a high dud rate. They've come out with two improved versions and this latest one has an antidisturbance device built into it. So this will probably be less of a problem to us now and maybe more of a problem for the VC.

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[1] This interview was reconstructed from notes.

Q. Do they get a lot of their munitions from U.S. ordnance?

A. I would say about 75% comes from us. They get this from Air Force and artillery duds and stuff they pick up from ARVN and U.S. units. One thing U.S. units have to re y concentrate on is not leaving things around--like going off and leaving Claymores, ammo, and grenades--because the VC always go in behind you and pick up anything you leave. We really need to emphasize supply discipline.

Q. What other points do you emphasize in your instruction?

A. One of the main things I talk about is the GI's curiosity and how it will get him into trouble over here. About forty men have been killed or wounded in the division in the past year by picking up VC souvenirs that were boobytrapped, or fooling with duds. For some reason or other, if it's a U.S. dud they think it's probably safe because the U.S. Army always puts a half dozen safety devices on their stuff. Actually, the VC use their own firing devices in our ordnance a lot of times, so this confidence in the U.S. safety devices is wrong. The main thing is to teach them to leave these things alone because they aren't trained to disarm them. In fact, I wouldn't even try to disarm a lot of them because of the shape they are in. The only thing they should do is mark it, report it, and if they have a demo man in the unit he should blow it in place.

Q. Do you EOD men ever disarm these things?

A. Sometimes. If we are called in on one that's new or unusual, we will take our time and try to disarm one for its intelligence value. I've sent back quite a few items that eventually wind up at a place called CEMAC at Ton Son Nhut where they have a collection of all types of VC and NVA weapons, ammunition, and equipment.

Q. Do you have any recommendations for improving mines and boobytraps training in the States?

A. Well, like I said before, one of the GI's biggest problems is his curiosity and his misplaced confidence in U.S. ordnance. Maybe if they could give him some demonstrations to show the effectiveness of some of these things, it might teach him a little more respect for them.

INTERVIEW WITH THE 1ST PLATOON LEADER
OF COMPANY A, 65TH ENGINEER BATTALION

Q. Would you describe your platoon's recent mine sweeping experience?

A. On 23 January, 1st Platoon, Company A, 65th Engineers was given a mission to sweep a road from the vicinity of Rung Khe northward to a point just south of the Bo Loi Woods. On this mine sweep mission we had two teams coming from Rung Khe and two teams going south from the position of the Bo Loi Woods, with an NCO in charge of each team. About 600 to 800 meters north of Rung Khe, the two mine sweep teams encountered three antitank mines similar to our M15 antitank mines. These were gray and were covered with a plastic VC poncho. There were two on the right side of the road and one on the left side of the road so that a vehicle was bound to hit one or two of them. These mines were detected with the use of the P-153 transistorized mine detector. They were planted in the ground in the road with about two to three inches of gravel cover on them and were easily detected by the mine detectors. They were blown in place using one-half pound of C4 charges which made a crater about four feet in diameter and about four feet deep.

Q. How did you have your mine sweep team organized?

A. There were two men per team plus an NCO in charge. In this case it was a SP/5. Two mine detector operators, two probers and an NCO to run down the center of it to make sure that their fields of sweep overlapped and to make sure they covered the shoulders of the road. I had one demo man in each of the teams.

Q. How often did you switch the detector operators?

A. Generally we switched between 20 and 30 minutes, depending on how the operator felt. Some of the boys actually swept for an hour straight today. I had one man sweep for an hour straight today and said that it didn't bother him. He could still hear it fine; didn't miss a thing. When they swept it last month before Christmas, they said quite often Sergeant Williams had them running an hour and a half straight at a time. It was the only way you could make time with the sweep. Of course, we weren't sweeping all the time, we'd turn it off occasionally. Cover sections of the road and turn it off again where we feel hard top. This is what we did today. About three klicks from where we started we ran into blacktop in the center. I just started sweeping the shoulders and even then only certain sections of it.

Q. Did you have adequate time?

A. No, we were pressed for time and, in fact, we were getting very pressed for time when we found the first mine. The battalion commander and S3 of the infantry battalion we were supporting, were both on our back.

Q. Is that where your pressure usually comes from, the battalion you're supporting?

A. Usually from the operations officer, the S3. He was in an overhead chopper and he could see us down there. The first thing he asked me was why this team that found the mines was moving much slower than my other team. I was coming south and I was moving a good two klicks in about an hour and a half. This team coming north only moved about 600 meters but they were finding all sorts of tin cans and nails. So were we, but not as much. We found some artillery shells, all buried. All the tin cans were recent. They weren't rusty at all and hadn't been in very long.

Q. You got the impression they had been buried?

A. Yes, definitely from the other team's end. They were definitely put there intentionally because they were brand new cans.

Q. Just to delay you?

A. I suppose. With loose cover you could probe right into it, just go right into the can and scrape it away and dig your can out. A lot of times when you find the old stuff, it's in real hard ground and you're not sure what's there.

Q. Have you had any mines exploded by the mine sweeper coming over the top of it?

A. I've never heard of it. I don't know how much it would take to set them off but it wouldn't be very much. Usually you go along and put the detector right on the spot. A little circle marks the spot for the prober to probe. This mine with so little cover on it has the plunger sticking right out. I don't know how much it would take to trigger that. One of the men said that he's seen bicycles set them off. The same type of mine we run into on a mine sweep. One of my demo men had seen these before and blown them up. It was the same kind of mine he found last month. They swept all those tin cans, about 50 of them, and the last one was a mine.

Q. But there was plenty of metal in the mine so he didn't have any trouble detecting it?

A. The detector was running down after all these tin cans and the way I got the story, the man sweeping said, "I've got one this time for sure." And sure enough there was one because it was really a loud sound, a lot of metal.

Q. On another subject, what about your training at Fort Belvoir? What course did you go through?

A. Officers Basic.

Q. How much did you get on this land mine warfare subject and how much, would you say, was oriented towards Vietnam?

A. We had a two-hour block on Soviet mine fields and a two-hour block on Viet Cong mines and boobytraps. That's all I can remember relating to this. We had other things like putting in mine fields and things like that.

Q. Did you ever have a chance to use a mine sweeper or mine detector to find out what it was like?

A. We had classes on the mine detector itself, where the men showed us the detector and how it was used and everything, but I don't remember the principle of how it works. Besides it was a density locator.

Q. Did they talk about just this P-153 and did they talk about the PRS4 at all?

A. We heard about it, but we had no manuals on it. It was just a strenuous class, you might say--no studying or anything like that. They planted some mines for us and we did have practice with detectors, at least some of the men did. I was a prober so I didn't get any practice myself. They broke it down into two-man teams, a prober and a sweeper, but it was just that we had so little time. I got to hear the tone a few times.

INTERVIEW WITH A CAPTAIN AND THREE SERGEANTS
FROM A CO., 65TH ENGINEER BATTALION FOLLOWED BY
AN INTERVIEW WITH A SP/4 MINE SWEEPER

Q. Let me start by asking how many of the total casualties of your company in the past year have been from mines and boobytraps?

A. 31 of 86 total casualties.

Q. How many of those were from mines, antivehicular and antipersonnel, and how many from boobytraps?

A. 25 were from AT and AP and 6 from boobytraps. A large number of those were from one big incident where a vehicle hit a mine.

Q. Would you give me a list in priority of the type of mines and boobytraps that you encounter most, that cause the most casualties?

A. Well, we run into the Chicom grenade the most, the next biggest problem would be command-detonated ordnance, then would be the toe popper with the 20 mm. in it, then the antitank or antivehicle mine, and then you run into a lot of these BLU-3 butterfly type things the Air Force drops and the VC pick up and use. Also, there's the U.S. type ordnance the VC pick up like 60 mm. and 81 mm. rounds that they put some kind of fuze in and use.

Q. On what type of operations do you suffer most of your casualties, is it search and destroy, road clearings, pacification or what?

A. Most all of our casualties are on search and destroy operations, then next it would be road clearing and just using the roads.

Q. About what would be the percentage of casualties for each?

A. About 80% for search and destroy and 20% for road clearing and using roads.

Q. Under what conditions did you normally encounter these mines and booby-traps? Was it in the jungle, near villages, near enemy base camps or near roads?

A. We usually ran into them in the jungle, at enemy base camps, then next it would probably be on road clearing operations.

Q. Just where were the ones you found at enemy base camps?

A. If the VC were still around they would usually have them on paths leading into the base camp or the entrances to it but if they had moved out they'd probably be in their positions in the base camp. Most of them were in the positions.

Q. What kind of fuzes did the enemy use most?

A. They used instantaneous and command-detonated most of the time, about 80%,

and the rest were delay.

Q. What type of initiating action did they use?

A. They used the pull type most, about 60%, you know, trip wires and that kind of thing. Then about 25% were pressure, about 2% electrical, and the rest were pressure or tension release or that type of thing.

Q. Did you see any friction or chemical types?

A. No.

Q. What is the primary way you have of detecting enemy mines and boobytraps? Is it by visual means, by mine detectors or by what we call tactual means (hear, touch or smell)? Or do you detect them because the tactical conditions tell you that over here is a likely place and you should go over here and look?

A. On a search and destroy we'd probably have to do this. Go look carefully in logical places.

Q. You think the biggest percentage then is by visual detection?

A2. In other words, as soon as you discover something, you look further.

A3. That is visual for boobytraps and mine detector for mines in the road. I'd say the large majority on a search and destroy mission are by personal contact. There's an indicator there. Somebody has either hit one which gives you the first indication that the area is mined or some individual spots one and this is your indication. Then you get in a certain area where Charlie marks all his mines with some kind of a marking system, a dead stick or something like this. You can't go by this overall; this is strictly for a small area.

Q. If visual means is your number one way of finding them, how do you do it? Is it normally by signs that he's put up to warn the local people, by the triggering device that you spot or by the mine or boobytrap itself. What's the main way?

A3. I'd say personal contact. Somebody gets hit. That's all. Somebody gets hit and in most cases that's our first indicator.

Q. You don't spot most of them?

A3. No, somebody gets hit and then you'll spot them.

A2. You can't walk and look for mines all the time, because if you do you're only going to walk about 100 meters. Other mines are detected deliberately by both visual and mine detector on your roads. When you're on a sweep, it's both visual and by the use of a mine detector.

Q. Well, I take it you don't find too many by the signs put up to warn the local people or by finding the triggering devices?

A2. Once in a while we hit a good sign that'll tell us that this area is mined and we should be careful. You can find mine signs just about any place you want to go. Charlie puts that mine sign up as a decoy.

A3. If you knew about the mine signs, you probably wouldn't move out of base camp. As a matter of fact, you'd probably need a helicopter to move out of base camp.

Q. So, usually, you don't gain much by those, but do you usually see the triggering devices?

A2. Very seldom do we find a device before somebody hits one.

Q. Do you ever detect them by tactual means like feeling and all that?

A2. Possibly in a tunnel, yes. Tunnels, possibly in bunkers, or in trenches.

Q. Do you have any other kinds of help in detecting these, like dogs or a PRS-4 for tunnels?

A. No, we haven't. I've been in different units who have spoken to me about the PRS-4, but I can't give you any factual experience.

Q. You haven't been able to draw it?

A. No.

A2. We've heard of a method used. The method of using Chieu Hoi's to go ahead, they're very good at spotting them. Also we sometimes get some volunteers, people from the local village to go with our lead element. We also drag a piece of wood in case there's trip wires.

Q. Do you have any ideas on how to detect or neutralize command detonated mines?

A2. That is a problem. Actually, I don't know of any real good way.

A3. They say you have to find the VC before he has a chance to set it off, before you get too close to it.

A2. Well, wires are an indicator. If you find any wires in the side of the bank where it has been disturbed, or possibly a hole has been dug back into a bank where there shouldn't be a hole back into the bank. Of course, color is an indicator. Charlie uses a lot of blue wire and in many cases he will use black wire. But I'd say the majority of his command detonated mines are most probably placed around a base or permanent position We have one place down here that we call the demolition school. Charlie sends his people out there and gives them a class on demolition to blow this one particular place. There's no telling how many times he'll blow that one building. I know they've blown it at least 8 or 10 times, the same place.

Q. How carefully does he hide these wires?

A. Quite well, in most cases. We had a company commander who found the wires and he was trying to find the end of the wires with the firing device on it. They were tied in some kind of trench hole with a pressure release or some kind of device to set off the boobytrap. Not the main line it doesn't go off. He traced the wires back and touched the boobytrap off and he ended up with shrapnel in the face.

Q. Do you ever do any night detection for mines and boobytraps?

A2. Not if we can possibly help it.

Q. Has anybody ever used a mine detector or breaching procedures at night?

A. We never have that I know of.

A2. The only thing that moves over here at night, that I know of, are the people on the road and 3/4 Cav that runs the road out here on Highway No. 1. The only indicator that I would know that they had was they found a hole where Charlie had dug in the road. And they have found Charlie in them.

Q. Charlie's in the act of putting the mine in?

A2. They'll come upon him in the middle of the night. Other than that, most of your ambush patrols and your patrols move out at dusk at a predetermined position and they just go to it. They're not searching for mines on the way.

Q. When you're moving on one of these search and destroy operations and you find a mine, then what's the procedure?

A2. Find it and destroy it.

A. Generally, on search and destroy, if they're going through a jungle and they halt, the company commander will be right behind the lead element and right behind him, close by, will be the engineers.

Q. Have you ever been on this mission?

A2. Yes, sir.

A. Do you find yourself near a company commander a lot of times?

A2. Yes, sir.

A. And a call will come up from the lead element that they found a booby-trap or something like that and the engineers will pull up there and they'll plant a charge on it and blow it. They'll wait till the column passes and blow it and then fall in at the end of the column. That's what they do.

A2. Yes, sir. And then move back up to where the captain is.

A. We did run into one problem down in Delta Company. A man blew one himself and there was a question in a lot of people's minds as to just how far back it was. He blew the charge and right after it went off he was gunned down by an AK47, killed right on the spot. His body was lying about eight or nine meters off to the right. He was thrown over a berm out of sight. They had to come back and search for him. The question came up, then, just how far does he go back in the column. In general, the engineers hang around the company commander but this will vary with the company commander. He's there where he can control them when the call comes that something's been found, it's reported to the company commander and he makes the decision on what to do. The decision normally is to get the engineers to blow it.

Q. Do you ever try to disarm these things?

A. No, never. Damn well better not.

A2. The only time you try to disarm is when you find a large mine over a bridge or a culvert and it's going to destroy the road. Then you will try to disarm them.

Q. Do you think you could do it?

A2. Definitely.

Q. If not, what do you do?

A2. When in doubt, blow it. No matter what happens.

Q. If the infantry doesn't have engineer personnel with them, do they send for you or do they just blow it themselves?

A. They blow it themselves.

Q. Do you ever by-pass these things because maybe you don't want to make a lot of racket, or because of lack of time or danger of receiving casualties?

A. We've by-passed these with infantry along.

A2. With infantry, yeah.

A. A couple times we had instructions to.

Q. So sometimes you do by-pass them because you have to. Do you mark them and report them then? Things like that?

A. I won't lie to you, no sir I never have.

A2. Well that would be hard for us to say because our people are usually a SP/4, a PFC, and maybe a sergeant, E5, with the company and they're not going to have the marking or reporting capabilities or responsibility. It's up to the infantry.

A3. I'd say the big answer is no.

A2. It's up to the infantry company commander.

Q. What about the methods of reporting and sending information back? The first guy that sees it, what does he do right away? Does he pass the word back down?

A. He tells everybody to watch out for it and keeps right on moving.

Q. Then what about the company commander, does he report this back by radio?

A. Well, he reports it to the guy flying around over us.

Q. That's the battalion commander?

A. Yes.

Q. So he does report it?

A. Most of the time he does, when you're out on a battalion sweep.

Q. Now, do you know if they're required to turn in a written report afterwards?

A. Not to my knowledge, but I couldn't say definitely.

A2. That varies with battalions.

A3. I truly believe that, as far as mines are concerned, when we find a mine, we radio it in and battalion normally marks it on a map, what type of mine, where it was found, etc. But intelligence as such from one unit to another, I would say, is non-existent.

Q. Now the engineers, do you report them?

A3. I do report them to the battalion when we find them.

A2. Well, let's put it this way. Say an engineer goes out with an infantry company and he by-passes two boobytrapped 105 rounds. I'll guarantee you I'm never going to hear about those from the company, and battalion will never hear of it. Unless two days later, I'll have a talk with the man and he'll say that they by-passed those two rounds.

A. It'll go like that. He doesn't have any orders from me to report something like that.

Q. But the infantry should, nevertheless, shouldn't they?

A2. Yeah.

A3. Anytime we find one on a road, particularly if it's a road clearing mission or anything like that, we report it to the best of our ability, the firing device, method of firing, the description, everything you can give.

A2. About as close as you can report it.

Q. Do you have any forms for this?

A2. Yes, we do.

Q. Do you include this in an after-action report or anything?

A2. Wait a minute, let's pin it down. What type of job are you talking about? For example, I've got a cigarette and two safety pins and these can blow a car load of stuff. And I don't have coordinate one.

A3. Well, sir, if I'm working out here on a road with you and I run across a mine, I'll fill in the nine steps and try to determine what that mine is.

A2. You're talking about a job where we have an engineer mission building a road. As an engineer, we find it, and we take care of it. But, when we're in direct support that information does not come back from us. It's from the infantry.

A3. That is so. That's absolutely correct.

A2. There's no need for two separate reports.

A3. So theoretically, it went to the infantry.

A2. Right. That's correct, that's exactly it.

A3. The only reason it's reported back to our engineer channels at all is just so battalion and myself can keep a running tab on whether they're doing any good out there.

Q. Do you include it in any kind of after-action report?

A3. We do, but just in ours. For example, on operation so and so, a certain platoon was out with a certain infantry unit and they blew so many of this kind of mine and so many boobytraps and what not.

Q. Could I get a list of those nine steps you were talking about? Do you have a form?

A. Yes sir.

Q. How about dissemination of information? In other words, before you go out on an operation do you receive as part of your intelligence information that in this area there are mines and stuff like that?

A. I don't know if these guys receive it or not, but I receive it and how well they receive it depends on how well I passed it down to them. I would say, that since I've been a company commander I have received about three good briefings. And the last one in particular was the Omaha operation.

Q. Did you go down there?

A2. Well, part of my platoon, yes sir.

A. I think I passed it on pretty well to them exactly what to expect to find. They expected to find the enemy behind hedgerows, along tributaries of the river and they expected to find a great deal of boobytraps. And people who have been there could describe what type of boobytrap they'd expect. The briefing I got was very good.

Q. Is any of this mine information disseminated regularly in the form of written or verbal information? Any regular distribution?

A. It's non-existent.

A2. You don't know what has been going on.

Q. Very little info?

A2. You don't get it.

A. That's true. We do not know down here at this company level what our own particular brother companies have been doing until I go to the weekly commander's call up at Tay Ninh. Then I find out in general terms what the other companies have been doing. However, I don't find out what particular things they ran into.

Q. Do you need to know this if each company's supporting a different brigade?

A. Yes, for general information.

Q. Of course, this information is probably more important for an infantry unit, because they operate in areas interchangeably many times?

A. It might be interesting for somebody in the platoon to know that sooner or later there's going to be a sister battalion and another team in there, and it might be interesting for the company that's going to support that battalion to know that somebody yesterday or the day before actually encountered ten mines that he couldn't cut the wires on. Once in a while, something peculiar like that'll come up.

A2. Now you take that EOD man explaining that bomblet thing, about the wires and trip mechanisms. I know, personally, that was turned in to the infantry seven or eight months ago. The first one we found was turned in because it was fantastic, you couldn't move that wire two inches in any direction without it going off.

A. Of course, I'm not down on the infantry, but I don't believe that intelligence is disseminated from one unit to another. Because one unit will go up one particular road, and when the next unit has to go up that road, it's all new. And if we gotta go up that road, it's all new to us. Maybe somebody's traveled that same road 50 times, but 50 times it's been new. Our intelligence is nonexistent.

A2. The information you receive from the battalion S-2 section doesn't come as written information. The only information I can disseminate is what I get at staff meetings. And what I get at staff meetings is a summary of the locations where all units in the division received contact, how many body count they had, and so on throughout the preceding week. I also get the location of known enemy units at the present time. Now, details I don't get and I never see any written summaries or anything like that.

A3. I believe that there's a great deal of false reports on mining. Now, I know I blew two mines, or two unrecognizable ordnance-type looking items on a road last week. I blew them because I didn't know what they were, rather than try to mess with them. I don't believe I got a secondary explosion from either one of them but the battalion commander I was working with was tickled pink and said that we saved at least 20 lives by finding those two mines. And by the time it got over the radio we had 30 pound mines that we had destroyed.

Q. What about the adequacy of the training in mines and boobytraps, first of all,for the average enlisted replacement? What do you think about it when they come here from AIT?

A. Completely inadequate. Totally inadequate.

A2. When I came out of AIT, they pushed you through it too fast. You're there one day and the next day you're off, and you're expected to know it all. There isn't any way that you can learn it all in that time. When you come over here, it's the same way. They show you everything, but that's all it is. Not all of it can sink in that fast.

Q. When did you first learn how to operate a mine detector?

A2. Over here, on-the-job training.

Q. You were trained going down the road?

A2. Yes, sir.

Q. After about the fourth or fifth time you figured you started knowing how?

A2. Yes, sir, that's the way it goes.

Q. How about the NCO's mines and boobytraps training?

A. I'd like to have been trained a lot better. I don't see how it can adequately prepare you. The only school that I've been through in my life that even started to prepare me was the mine and warfare school at Murnau, Germany.

Q. Is there any kind of NCO course or advanced course in this mines and boobytraps area?

A. No, sir. Division has a leadership course for the new NCO's, but nothing as far as I can take. There's nothing open for older NCO's.

Q. Any kind of technical engineer training?

A. It is disgusting; there's nothing open for me. As an E-7 I've been to every engineer school, aviator school, special weapon school that's open to me and I still can't get another school that will help me. Only way I can improve my knowledge now is through some kind of correspondence course.

Q. What do you and the Captain think about the average NCO's training for over here?

A. Unless a man has a great deal of military experience behind him, years and years, this course at Murnau is the only place I know that might help prepare him.

A2. All it is is leadership. There are two types of people. One is the real energetic, good leader, obviously a leader, born leader, or whatever you want to say. A good man. He might be infantry and not know a damn thing about engineering, but I'll prefer him over the guy that knows every answer in the book, yet is not NCO material, if he has common sense. We've got some here that don't know anything about engineering but they're good people and they have worked before with people and we can teach them what they need to know about mines, people like the sergeant here, over a period of a couple months or so. Then you'll have a man you can't teach a thing. If he's good NCO material, I'll take him anyway.

A. Knowing this good technical stuff is fine if you have the time and know it, but he won't save as many lives as this engineer NCO will.

Q. So you think this conventional mines and boobytraps you can learn at the engineers?

A. I feel that we have the men, downright experts as far as the men who lay the American-type mine. They're trair and they're able to provide guidance to the infantry or anyone ir ting down a conventional mine field if we have to. The place where the NCO's are weak when they get here is not being very well oriented on how engineers actually operate in Vietnam. They get this short course before they come over here, but that's not especially for engineers, it's more for infantry NCO's.

Q. How would you remedy this situation?

A. Well, I have two ways. One is add time for a course. Take our combat engineers and set up a course that would be especially designed to bring them up to date on engineer operations in Vietnam. This could be during either on-duty or off-duty hours.

A2. I was just talking about that this afternoon. There's bound to be a sincere type or group of officer that would make Jim Dandy instructors. There's something else about a 30 or 40 hour course on the post for NCO's on mine warfare and other things. Somebody who's been here could instruct the course. Have two hours a week on it, like we used to do in Europe. You spend two hours of off duty time on these subjects once a week. It wouldn't take a whole lot. If we could get all this enormous amount of background and paper work condensed into a training kit in a box with some manuals, you would have a good 20 hours.

A3. That's fine but I don't want to have to go through all that crap that they could have taught us in the states.

A2. No, I'm talking about this stateside, never here. This is definitely no place for it. I figured the day I got here I went to work. I figured that's the way every troop should be, it's the only way; it's a 12-month tour. That's the only way they make any money.

Q. You think that maybe a refresher course before the people come over here would help on some of these things.

A2. I think it would help a great deal, for most men.

Q. How about officers?

A. They're no different from the NCO's; they just have a different insignia and a little bit different job. Same thing applies.

Q. In other words, their training is not adequate?

A. They could use the special training. It might not help, but they could use it. Actually, all that training is going to do is prepare a guy to be prepared. He's going to be prepared when he gets to the jungle, right.

A2. That's right. He at least has a foundation or something.

A. Then you go out in the jungle and you see one of these things up in a tree wired up or on a trail wired up, after you've encountered four or five of them and blown them in place, you develop a certain amount of self confidence; then you start being effective.

A2. Like on this operation we're on now. A new guy came in and he went out on a search and destroy operation and there was this bottle next to this bunker and he went over there and started poking it with his stick. I said, "Get the hell outta there." I knew what it was but he didn't and he had learned that in school before.

Q. I understand the mine and boobytrap training conducted for replacements at division is four hours, one hour EOD, one hour non-explosive, one hour explosive and one hour down the jungle path.

A. There's just one major note that I should explain about that training. The instructor doesn't talk much about demolitions. They need more on this.

Q. Is there any follow-up training then when the man gets to his unit?

A. It all depends on the platoon leader; he doesn't usually have time to train them. We have wanted many times to have a demolition school here in the company, since way back when. We wanted to get them all together and have demolition training, how mines are set up. Our present assignments just won't let us do it.

A2. There were times when I was back in Bravo Company when we had some slack time. Some of the good platoon leaders would take the green men out and give them mine detector training in the company area. Once in a while, you'll find somebody that'll do that but it's not very often. Most of the time it's just OJT training when they hit the field.

Q. Any advanced training for selected personnel or NCO's in the company?

A. No.

Q. How could they improve the training on mines and boobytraps in the States?

A. I definitely feel that they've got to take a realistic view of what they've got. Right now, 99% or 100% of the training is geared toward US land mine and US boobytrap. The men are not well informed on the type war we are fighting here today. They've got to have intensive training on the type of ordnance that they'll find here, the type of mines they're going to find here, and extend the training on mine detection.

Q. Anybody else got any ideas on training?

A2. In my opinion I think they ought to set up a simulated VC village with all the types of things they might run into here.

A3. I say put the ordnance in their hands. In other words, you could make a dummy Chicom grenade. Satisfy the curiosity of a normal boy; let him get his hands on it and he'll remember it.

A2. The main thing is to make up a lesson plan that calls for more practical work so the man can set his hands on the equipment.

Q. How about the training in-country?

A. That's ideal to me.

A2. It could most probably be extended; the time permitting. Also, I would say you need more demonstrations. Two-thirds of the kids that come over here with engineer training have never seen a mine actually detonated. He has never seen what an antipersonnel mine can do. He's never seen what a grenade can do. He's never really seen what anything can do. A prime example of this is the M18A1 (Claymore) or antipersonnel mine. The kid has no idea of what it looks like or what happens when it's detonated. Detonate some of these things; let them see what they've got; let them see what can happen.

Q. How about any recommendations for improvement in the field, like say on detection of mines?

A. Well, I still say we need a smaller search head for jungle operations.

A2. And a more durable detector, and a means of carrying it in the field.

A. I'd say more durable, carrying pack, and smaller head, in that order.

A2. You don't mean a smaller permanent head; you mean a detachable head.

A. Right. Oh, yes, it has to be interchangeable, or you'll be defeating your purpose.

Q. Any other ways of blowing the mines?

A. Most everybody gets over here and, because the individual is not trained properly in explosives, the only thing he knows is plastic. He loves C4; he likes to work with plastic explosives, and he uses it to the extent that he overloads everything about 100 percent. He'll blow a normal mine with a half pound of TNT and, I'd say, in most cases a quarter pound of TNT is going to do the same thing. They need jungle training, and training in explosive devices that we use. They also need to know what a half pound of TNT can do, and what a pound can do or what two pounds'll do--needs to know how to use it.

A2. We have been so close to shooting down our own choppers because we didn't have light, dependable electric fuzes to carry with us. It's unbelievable.

A3. You leave a three minute fuze on a piece of ordnance you've found, then move off to your positions, and you're just liable to blow up a chopper.

Q. How about your reporting procedure, is that any problem?

A. Except when we have engineers working a job, like the captain explained, we don't have a reporting procedure other than mouth and sight.

A2. All demolition equipment that's put out today needs up-grading. I'm talking about the equipment. I'm talking about the searchers, the galvanometer, the developing machine, the wire, the reel. Everything that goes along with it needs up-grading. We're using junk from WWII.

A3. It's too heavy, too bulky.

A2. Heavy, bulky. It's just not fit for the jungle.

A3. It's too much.

A2. Why do you need 500 feet of wire to carry around the jungle with you, when even if you're blowing a large tunnel complex, you're not going to move off more than a 100 feet or so.

Q. What do you recommend on this disseminating of information?

A. It should be pooled. And most probably put down the most important item. Put out a fact sheet, a bulletin.

A2. Yes, they could devote one page to one item, or something like that.

A3. That's right. So everybody that gets a paper could see.

Q. Do you have any idea what the principal marking systems are that the VC use in this area to warn people of their mines?

A. Normally, down along the Oriental River he usually has a group of sticks, always dead, without leaves. Not in a pointing type method, just a branch that was dead and like a little fence. This is where he'll put Chicom type antipersonnel mines or inverted grenades or whatever you want to call them.

A2. He likes to use a broken stick. Not broken in half but usually in a U shape, bow head stuck in the ground, horseshoe shape. It sits on top of the mine itself. These are just plain charges, not big for a mine, but they get a hell of an explosion out of them.

Q. Any others?

A. He doesn't think the GI's very smart. He puts up signs for his mine fields, and there might be something there. Then he might put up a sign and not have a thing there.

A2. That's true. We'll pick up a couple of local residents to help us when we're moving through there. I remember one day there was a big sign with a skull and cross-bones with "mines" written all over it.

A3. We have found times that they have used wooden poles for sights on the road, you know, aiming stakes for command detonated mines.

A4. This also goes for your RPG's. At night, they put two stakes out and he'll fire between those two stakes, because he knows he's going to hit in that particular area.

Q. Can you think of any that you see along paths?

A. No.

A. On road projects, we put RC-3 on them, which is a chemical, and we spread it quite heavily. Then when Charlie comes in to mine at night, you can see where he has dug. I think this eliminated any mines that he would have put in this road.

A2. This happened one time in particular, during the first two weeks I was in the country, back during the last couple weeks of Manhatten; the 10th Mech was getting a tank or an APC blown in one particular spot every day. It was just bam, bam, bam, like that. The colonel said he wanted it soaked with RC-3 till it was running off the road, so that no more could soak in. This stopped Charlie.

Q. What's an average age of most of the men that you use as sweepers?

A. Probably 19 or 20.

Q. Do you ever have a training problem with these men?

A. No, not often. He's either got it or he hasn't.

Q. In your particular case sergeant, how long have you been in the service?

A. Ten years the last of this month.

Q. How long in Vietnam?

A. A year.

Q. Have you ever had any training as a sweeper in the jungle?

A. Formal training? Not that I can think of, sir. I had OJT off and on at one time or another with the PRS3 since I've been in the Army. Combat engineers sweeping out bivouac sites and this type of thing. I had it in Korea, too.

Q. How long a period of time?

A. It's hard to say. You use it on every operation, road clearing, this type of thing.

Q. How long were you in Korea?

A. Twice, a total of about 20 months.

Q. Did you use the detector all the time you were over there?

A. Yes, sir. That's one thing you did do a lot of in Korea.

Q. Do you have any training of replacements?

A. Not on mines and boobytraps or recognizing VC mines and stuff like that.

Q. Nothing on mine sweeping, though?

A. No.

Q. Do you have a preference on the PRS-3 you used in Korea and the P-153?

A. The 153 is far better.

Q. Do you think the 153 is affected by chaff, you know, small pieces of metal and stuff like that?

A. Well, it certainly is.

Q. How about the soil content?

A. It's affected, too.

Q. Anything else affect it?

A. I've been told that salt water would, but I've never had the chance to find out.

Q. What would you say is the best method of sweeping a normal two lane road?

A. Probably with three detectors, if we were able to get that many, in a normal staggered formation.

Q. How much of your time, would you say, is lost on junk?

A. Probably about half of it.

Q. What advantages would you say the 153 has?

A. Well, it's lighter. It's not nearly as easy to upset. Now you could drop the PRS-3 one time and jar a tube out, and it had to go to signal to be calibrated. That thing was a pain in the neck.

Q. How about the 153's disadvantages?

A. Just that goose neck where the search head joins; the handle is more delicate at the base here.

Q. Any recommendations on it, on how to improve it?

A. Well for instance do something about that one place where it usually breaks. That's where the handle joins the search head.

Q. How about the search head? Do they become cracked or broken.

A. I've never had one become damaged, the head itself.

Q. You know these VC pressure switches that have nothing more than some wire wrapped around them; do you pick those things up?

A. I have picked them up.

Q. What was the deepest they were buried?

A. Probably only an inch or two. Not very deep at all, pretty close to the surface.

Q. What would be your estimate of the time it would take for a recruit AIT-type to become efficient with the 153?

A. Two days.

Q. Would you give any refresher training here in Vietnam?

A. No, I don't think so. They would get the training here in combat.

Q. How long would you say in combat it would take them to become an efficient sweeper?

A. If we use them every day, a week.

Q. What would you say would be a normal sweep rate for one of your teams?

A. They can sweep about a mile an hour. This includes a lot of eye-balling the road too, inspecting the side.

Q. What kind of psychological problems do the sweepers have placed upon them by the situation or the equipment?

A. A good psychological effect I think, sir; the guys trust the detector. They have a lot of faith in it and I don't miss a chance to talk it up. What an improvement it is over the old detector, and I think it has a good psychological effect.

Q. How about maintenance of equipment; do you do any maintenance on it?

A. The only thing you can do is clean the dirt and dust off it.

Q. Any other general comments you care to make on this subject?

A. I agree that a smaller interchangeable search head would be good; it could reach into the bamboo and maybe the hedgerows.

A. We have some problems with the protective holder; when the monsoons start, they leak. Or the men will get in a rice paddy, and they'll get hit or get sniper fire, and they'll dive in the paddy. The detector will become inactive or malfunction due to the fact that a little rubber gasket or something came loose or became worn.

INTERVIEW WITH SP/4 MINE SWEEPER

Q. How long have you been in this unit specialist?

A. Eleven and a half months.

Q. How long have you been sweeping?

A. Everytime we have a sweeping mission since I've been here.

Q. Since you got here. Did you come here right out of Engineer AIT?

A. Yes.

Q. How much mine sweeping instruction did you have in AIT?

A. Well, we worked with the mine detector a little.

Q. Which one were you using?

A. The metallic type but we didn't get much on it.

Q. You didn't have much training in AIT at all?

A. No.

Q. Not enough to prepare you for Vietnam?

A. No.

Q. Did you use the detector at all in AIT?

A. A little bit but not enough for over here. I've been over here a year and a half and we worked on this road for about three and a half months. We had to sweep it every morning. The new guys that we got in the company would come out with a platoon and help us sweep the road. They'd get on that mine detector and they didn't know how to work it right. They'd swing it through the air, 20 feet off the ground. They didn't have any idea of how you work it. People coming from AIT really aren't trained in the use of the detector. Maybe they are teaching them correctly but it doesn't sink in.

Q. When you arrived in Vietnam, what sort of orientation were you given on the mine detector?

A. Well, we went to this school for three days.

Q. What school?

A. The one up here about Ambush units and that stuff.

Q. For three days?

A. Yeah, that's what it used to be.

Q. That's just your overall replacement indoctrination training?

A. When we came over here they gave us that school for three days and that was supposed to teach us everything about Vietnam.

Q. Then you never had any training strictly on the mine detector?

A. Well, they had these classes in the unit that they gave our squad leaders on how to take the mine detector apart, how to operate it correctly, and how to put it back together in the case to take with them. And then they went through the squads and taught each person how to use it.

Q. Before you actually went out and started sweeping, do you think you really understood how to do it?

A. No.

Q. Was it mainly on-the-job training then?

A. That's right.

Q. What are your biggest complaints on the P-153 mine detector that you're using now?

A. It's not durable enough.

Q. In what way?

A. I don't know, they just break. Not physically, just the inside parts. It doesn't detect the metal right.

Q. What would you suggest in the way of improvement?

A. Actually, I couldn't tell you because I don't know that much about the inside of a mine detector.

Q. Could you recommend anything that may make it easier for you to work with or carry?

A. I'd make a lighter case.

Q. Do you take the case with you very often?

A. Most of the time when we go out on a road. We take it with us every day. We put them in the back of a truck, bring the trucks up the road, take them out, sweep the road and then put them back in the case. When we go on these eagle flights we have a mine detector with us and they'll chop through the jungle. We don't take the case with us then because it'd be too heavy.

Q. Well, how about the mine detector itself? Do you like the way it's built?

A. It's light enough. It's all right. The wires can get caught on trees and such when you're going through the jungle, but that's only natural.

Q. What do you do with it when you get tired?

A. Fold it up, set it on the ground, and take a break.

Q. What would you think if you had a carrying strap for it; a little strap so you could throw it across your shoulder? Especially when going through the jungle?

A. Yes, that would be good.

Q. How do you carry it now? Just hold it in your hand?

A. Just walk along and hold it underneath your arm. I think they could compress it a little more and get those wires all tight together where they wouldn't just be hanging.

Q. Maybe one cable?

A. Yes, that way, you could just clamp it to the side if they were compressed together.

Q. How about if you were sweeping in the jungle and you had a narrower search head? Would that make it any easier?

A. Not really, no.

Q. How about a detector that you could connect by sections so that you could just replace one when it goes bad?

A. If they could get all the parts over here, yes. When we have a broken mine detector over here now, we have to turn it into commo and it might take a month to two months to fix it up. And you don't have the use of that detector for that length of time.

Q. How do these things normally get broken?

A. They just stop. We'll be sweeping the road and the batteries'll go out or they'll be loose connections on top. You put the battery back in and that little spring job with that wire coming out loosens up sometimes. On the ear phones, the little screw that goes into the side loosens up. Sometimes they strip themselves.

Q. Can you do any maintenance on that yourself?

A. We're not supposed to, no. Not supposed to touch them. I've tried putting the screws back in. We replace the battery and that little red, white and blue jobby that's on the inside; I've replaced them but I have no idea what they're for.

Q. If it doesn't work, you take the old one out and put another one in and if it works, you don't worry about it, right?

A. Right.

Q. Do you have much trouble with the search head or the handle itself breaking?

A. No, just that plastic bolt on the bottom loosening up sometimes. Making it adjust to the angle you want when you're sweeping, and it just wobbles all over the place.

Q. What other complaints do you have, say about the equipment or suggestions possibly for improving it?

A. A lighter case and a carrying strap like you suggested.

Q. What do you think of the method you use to sweep?

A. It's the way you learn it here in on-the-job training.

Q. How high do you normally keep the search head above the ground?

A. About three inches.

Q. When you're going over an area where there's a lot of metal scattered around or in the ground, do you ever vary the height in order to get a better reading from a large metallic object?

A. Well, let's say, if you've got this little piece of shrapnel over here and they put a bayonet on the ground, the bayonet reading is going to be a little higher reading. Now if you have a metallic mine in the road, it is approximately the same as the bayonet because you've got about the same amount of metal, more than that piece of shrapnel, so that's what you look for.

Q. Can you tell the difference between a mine and a piece of shrapnel?

A. Sometimes you can, yes. But then you have these plastic mines with only a little metal cap in there.

Q. I mean anything other than the plastic mines. Can you tell the difference by the sound of the detector?

A. Well, after you sweep the road for a while, yes. You'll find a piece of shrapnel here and if it isn't a mine you just keep right on going. But if you think it's a little bit too loud, or if you get a real loud reading, you have them probe. It could be a mine or it could be a big piece of metal.

Q. Do you wear those ear phones over your helmet?

A. I have and I've worn them under my head gear to hold them on.

Q. Which way do you recommend?

A. It's comfortable to wear them on the helmet but I don't think you can hear as well because you're getting outside noises.

Q. How about as far as getting tone deaf?

A. After a while you do.

Q. Does it help to put them on the steel pot at all?

A. It helps, yes, but you can't distinguish the sound as well because it's so far away from your ear.

Q. Have you ever tried putting them down around your neck?

A. Yes. That's comfortable too, but it's still a distance away. When you have them on your ears you don't hear outside noises like trucks going by.

Q. You think the best way is on your ears.

A. Yes, right against your ears.

Q. Can you hear the other people on your team if they give you instructions?

A. You can hear them if they yell, yes.

Q. The important thing is how you can best detect mines?

A. That's what I would say, directly on your ears; I mean no distance away.

Q. When you came here, what MOS or what job were you coming over for?

A. As a pioneer.

Q. Did you know that you might end up sweeping?

A. Yes.

Q. If you could go through training over again do you think it would be best to have more time to use this equipment in the U.S.?

A. I think it would be. You can start giving it to the troops there in AIT, and in basic training a little of it would be good. A fellow who is going to come over here cares about his life and everything is important to him. So he's going to make the best of it, because he wants to learn it.

Q. In other words, in AIT you didn't pay too much attention?

A. More or less a give or take attitude.

Q. When they come over here, would you suggest maybe a week course just for sweepers?

A. I don't think they'd need a week.

Q. How long do you think?

A. A couple hours or two days.

Q. Would this be best as soon as you arrive in the country or possibly maybe wait for a month?

A. I think it would be best to wait. Maybe not a whole month, a week or two weeks. You get over here and you've heard all these stories and everything, your buddies telling you war stories, and you get scared. After two

weeks you get a little knowledge of what's happening and it would more or less ease your mind.

Q. How do you feel when you're sweeping and you know you may not be able to detect all the mines?

A. It hurts, because when you're sweeping a road you know you've got a couple of trucks in back of you, and you've got the mine detector, and it's all riding on you. If that truck in back of you hits a mine, somebody's in a bind and it's gotta be you.

Q. How about antipersonnel mines when you're sweeping? Does this bother you?

A. No, not on the road itself. When we move off to the sides of the road that we haven't touched before, then we worry about them.

Q. How long can you effectively sweep at one time before getting so that you really can't distinguish the sounds?

A. A little less than an hour.

Q. Then how long a rest period do you need?

A. Twenty minutes or so.

Q. What time period would you recommend?

A. For most people, less than an hour.

Q. Can most people do that?

A. I think so, after they've been here a while. After they've had experience with the mine detector.

Q. It doesn't wear you out?

A. It gets you tired, yes. But if you've got to sweep a road you've got to sweep it.

Q. What do you think is the best way to sweep the road?

A. You put your mine detectors a safe distance apart, two or three going down the road abreast in a staggered formation. You have a prober for each one, and maybe a squad leader to keep charge of them, to keep everything straight. That's how we swept the road the best. When we only had two mine detectors, we both did the real wide roads. We had them cover each side of the road and each guy would take half the road and this takes twice as much time and you wouldn't cover the whole road. You did as much as you wanted to.

Q. How fast can you go down the road and effectively cover it? How long would it take you to sweep a mile?

A. About an hour.

Q. Can you walk at some sort of a normal pace and sweep effectively?

A. I believe you can. You can cover almost everything. In other words, when you're sweeping, you can't cover the whole road, everything. You know you can't take one step and sweep it, and take another step and sweep it. You try to keep a steady pace while you're walking down a road and try to sweep as much as possible. You have to try to catch everything that there is and most of the time you do.

Q. How do you feel when you swept a road well and then someone came along and hit something?

A. If you missed the mine and something hit it?

Q. Right. Do you ever have times when you doubt your ability or the equipment, or are you pretty confident in yourself and the detector?

A. Well, when you're mine detecting everyone's usually confident in themselves but you don't trust the mine detector and yet you still have to sweep the road. At times like that, you might miss a mine. If something hits the mine, it's the mine detector's fault because it wasn't working properly; you knew it wasn't working properly.

Q. Have you missed any?

A. Myself, no. Maybe one day we missed one and nothing hit it and the next day we found it. Four of us were sweeping the road one time, and we missed a mine, and a grader hit it. Totaled the grader (total loss).

Q. How much do you actually depend on your eyes when you sweep?

A. Quite a bit. We're walking down a road and we see a fresh patch of dirt and you know everyplace else is dry. There's probably something there so you sweep.

Q. You pay more attention to suspicious areas. Do you think this visual observation is just normal procedure for a good sweeper?

A. I think it is.

Q. Have you ever used the non-metallic detector (PRS-4)?

A. No, I never used it. We use the P-153.

Q. Have you ever heard of anybody using it.

A. No.

Q. Which would you rather be, an engineer or infantry?

A. An engineer really. An engineer does something constructive and he can be proud of it.

Q. How do you experienced sweepers help train a new man OJT?

A. You get some of these new guys over here that don't know anything, and you don't have time to teach them. They could bring them back and we could tell them all about it and walk with them, you know. And let them watch the guys that are sweeping the road and then give them a try at it.

Q. If you're going down the road, three abreast, staggered, do you keep very much watch on the man in front of you so that you can overlap his path?

A. Yes. That's what we try to do when we have three people. You can do the same thing when you have two people but it's not as good a job of sweeping the road.

Q. You think then, that the best way to sweep a road is with three?

A. Yes.

Q. If you had to generalize on the men that you thought were the best sweepers, what type of man would you say?

A. Most of the men that make good sweepers have been here a while; they aren't the new guys in the section, no. After they're here a couple months they learn how to do it, and they make good sweepers, too.

Q. Is there anything about these good sweepers, any characteristic, that might help you identify this type of man?

A. It's just that some guys know how to sweep a road and some of them don't. It's just your attitude toward it, I guess, whether you care or not.

Q. Does your attitude change as your rotation date comes nearer?

A. Yes. You're more careful about it and you don't want to do it as much.

Q. Do you think a rotation schedule where you sweep for six months, and then do something else, would help?

A. I don't think that would be possible, and anyhow it'd be the same way. When you get close to the end of the six months, it'd be the same way as when you're getting close to going home.

Q. Do you look at sweeping as your major job over here?

A. No, this is just one job that you have to know something about.

Q. How many days of the week do you sweep?

A. When we had the road for three and a half months, we swept the road every day. Everybody swept the road. It was about three or four miles long and the whole platoon, squad leaders and everybody helped. Then when we weren't working on the road we were going out with the infantry, and they don't come into contact with mine detectors.

Q. When do you usually start sweeping in the mornings?

A. As soon as it gets light out.

Q. How long did you have to sweep?

A. As much time as you needed.

Q. Did you sweep all day?

A. No, you couldn't take all day because after we cleared the road they had to work on it. We had to get 100 meters done a day. But if you spend all day sweeping the road, as we did one day because we found a lot of mines, they couldn't do anything about it, I guess.

Q. What was the main purpose in opening this road? For resupply?

A. Yeah, trucks went down it carrying supplies. There were troops out there and they needed to be supplied. If it wasn't by plane, it was by trucks using our roads.

Q. What do you think would happen as far as your outlook toward sweeping if Charlie were to come in here and use nothing but plastic mines?

A. You'd be scareder than you are now and you wouldn't want to sweep the roads. Mine detectors don't pick up the caps all the time.

Q. How deep is the deepest you ever picked up a non-metallic mine, one with just a cap and some wire?

A. A couple inches underneath the surface.

Q. If something like this was buried six inches, could you pick it up?

A. I doubt it very much.

Q. How much background noise does this type of soil around here give you?

A. When we're working on a road we have a lot of it. If it's rained on and there's slop and stuff like that, you're slipping and sliding around trying to walk down the road. Six people. It is hard sweeping the road cause you still have to pick up the mines. Now if that area was dry it'd be a lot easier; we could sweep the road a lot faster.

Q. How can you tell exactly where the mine is with the detector?

A. I could pin point the mine when I tilted the detector a little.

Q. You don't get any noise in your head when you tilt it?

A. I didn't, no.

Q. You can g[illegible] a better feel for exactly where it is?

A. That's right, if it isn't such a big area.

Q. When you were sweeping a road, how far left or right of the search head do you think you could pick something up?

A. If it wasn't too deep, about six or eight inches.

INTERVIEW WITH A 1LT, THREE SERGEANTS AND A SP 4
FROM THE 3D PLATOON, CO. A, 65TH ENGINEER BATTALION

Q. I know you don't have access to any figures out here, but could you tell me what percentage of your total casualties were from mines and boobytraps?

A. I really couldn't make a guess at that.

Q. Could you tell me what causes you the most casualties, mines or boobytraps?

A. On that, boobytraps cause the most and mines are next.

Q. Could you give me in order of priority the types of mines and booby-traps that cause you the most trouble?

A. The one we hit most often is the Chicom or U.S. grenade set up as a boobytrap somehow or other. Next would be the BLU-3 and you have to be real careful with this one because now they have the fuze set up to go off if you fool with it at all. Then there's the tilt-rod type mine that we find out in the brush.

Q. What type of operation do you have most of your casualties on from mines and boobytraps?

A. Most of them would be on search and destroy operations and next I guess would be road clearing operations.

Q. Where did you encounter most of these mines and boobytraps: in the jungle, around villages, near enemy base camps or while clearing roads?

A. We run into most of them near enemy base camps out in the jungle, then next in or around roads we were clearing. We find some in the jungle around trails and least of all around villages where people are living.

Q. Could you tell me just where you find them in these places, like first the ones by the enemy base camps?

A. You find most of them on the paths leading into the base camps or the entrances to them. Next you will find boobytraps around food and ammo caches.

Q. How about the mines around the roads; are they in them or on the sides?

A. Most of them are buried in the road, then next they would be in the shoulders of the road, and then would come the command detonated type from the sides of the road. We usually have infantry security out on the sides to look for the command detonated kind.

Q. Where are the ones you find in the jungle?

A. Most of them are on the trails; then you find some along the sides of the trails and a few when you are moving through the brush off the trails.

Q. How about around villages?

A. Most of these will be in the hedgerows around the villages.

Q. What types of fuzes are used most by the enemy, instantaneous or delay?

A. Most of them are instantaneous, about seventy percent. The rest are delay.

Q. What type of initiating action does the enemy use most, pull, pressure or what?

A. He uses mostly pressure release and next electrically activated devices. Next would be the pull type, like a trip wire. Then there would be the pressure type.

Q. How do you detect most of the enemy's mines and boobytraps: by visual means, by mine detectors, because of the tactical situation, or what?

A. We spot most of them visually and next would be with the mine detector. Last would be because of the tactical situation.

Q. How do you spot most of them visually? Is it by seeing signs put out to warn the people, by seeing the triggering device, or seeing the mine or boobytrap?

A. Mainly it's by seeing some signs of where they put the mine or booby-trap, next would be signs of the triggering device, and then you sometimes find these warning signs.

Q. What kind of mine detector do you use?

A. The P-153; it's a metallic type detector.

Q. What are some of the things that tell you there are mines and boobytraps in an area?

A. The main thing is you look in the type of places where you've found mines before, where you know the VC like to put them. Then another thing is to get inf rmation from the people. We give them money and no questions asked if they turn in duds and things to us or point out some mines or boobytraps. Another thing, of course, is the attitude of the civilians, if they're friendly and there's plenty of civilian traffic on the road then there's no problem. Also, of course we check logical ambush areas as a place the VC might plant them.

Q. Do you have any other means of assistance in finding mines and boobytraps?

A. Well, the made one of these big rollers that they can push down the road ahead of a tank to detonate mines. That gives you about three hundred pounds per square inch and will explode most mines. Then there's the Rome plow that we use out here in the Ho Bo Woods. It sometimes pushes these mines ahead of the blade when they're clearing the brush and it goes off under the blade.

Q. Do you have any special techniques for detecting or neutralizing command detonated mines?

A. Well, first we check for wires along the sides of the road and sometimes the units use recon by fire in suspicious areas. Then we use the Rome plows on this some, too.

Q. Do you use rooters to try to get the buried wires?

A. No, we don't.

Q. Do you ever attempt to detect mines and boobytraps at night?

A. No. It's very seldom done, if ever.

Q. Could you give me the sequence of actions that take place when the point man spots a mine or boobytrap?

A. Well, first he passes the word l ck down the column and marks it. Then the NCO or officer will come up and check it to decide what to do about it, and it's reported up to the unit's next higher headquarters by radio. Then, usually, they will bring up a demo man who will usually be an engineer accompanying the unit. He will wait until the unit has moved on by and then blow it in place.

A. The training at OCS is good but if the man has had no previous enlisted experience then he will need more training. Also, they should go into more road clearing type operations and more into mine detecting. You get plenty on bridge building and things like that, but one of our main jobs here is this mine and boobytrap problem and you don't get enough on that.

Q. What type of training do replacements get when they join the division here in Vietnam?

A. They get this four hour class on mines and boobytraps at the division school.

Q. Do you have any follow-up training in the unit? How do you work them in?

A. They don't usually get any formal follow-up training when they join us. What usually happens is that they go out as probers on a mine sweep and observe the sweepers to see how they do it. Then every once in a while they try it while the old-time sweeper watches them. After a few times like this they move in and start to take their turn as sweepers. It's almost all OJT that they get in a unit.

Q. Is there any advanced training for selected personnel or NCO's?

A. About all that you'd have of that would be something like this eight-hours mine sweeper training that the 2nd Brigade has for the men from tactical units. We wouldn't send anybody to that; it's for infantry and armor type units to show them how to use mine detectors if they have to.

Q. Do you have any recommendations for improving the mines and boobytrap training in the U.S.?

A. Just what we said before, to have it oriented more toward the problems that we face here in Vietnam and less toward the conventional planting of mines and that type of thing. We don't do any mine planting here.

Q. How about recommendations for in-country training?

A. I think everyone needs a refresher course on this mines and boobytrap problem when they get here. Something that's going to tell you especially about the problems the units are running up against in the division area of operations. Then I think they should have periodic refresher courses where they bring you back and bring you up to date on any new developments the enemy has and new ways to counteract them.

Q. Can you think of any recommendations for improving actions in the field in detection or destruction of mines and reporting or disseminating information?

A. Just make sure everyone reports all new or unusual type mines or boobytraps the enemy is using. Then make sure this information is disseminated to all the units to warn them.

Q. Do you see these marking signs the VC put up to warn the local people about mines very often?

A. We see some but not very often. One type I've seen is slivers of bamboo woven together which is put on the trail. I've heard that there is a book from USARV on all these marking systems but I haven't seen it. Anyhow, the signs are different over the country.

Q. Do you have any other comments or recommendations?

A. Just one: they had a good one-hour class on these marking systems in OCS at Belvoir and maybe it would be good in AIT, too.

INTERVIEW WITH THE COMMANDING OFFICER, S2 AND S3
OF THE 4/23rd MECHANIZED INFANTRY BATTALION

Q. First I'd like to ask you about the number of casualties suffered from mines and boobytraps as compared to your total casualties?

A. It's about 50% from mines and boobytraps and 50% from other enemy activity. Actually, it's 220 out of 440 casualties for us in the past year.

Q. Of this total of mine and boobytrap casualties,how many were from antivehicular or antipersonnel mines and how many were from boobytraps?

A. Probably 80% of the casualties were sustained from antivehicular or antipersonnel mines, mostly antivehicular. Then there's 20% from booby-traps.

Q. Is this due to the type of missions you have as opposed to a straight infantry unit?

A. We move normally as a mechanized element on roads and, therefore, we sustain casualties the same way.

Q. Could you give me a priority list of the types of mines and boobytraps that have caused you the most trouble? First, what is the one that has caused you the most casualties and the most trouble?

A. A nonmetallic antitank mine.

A2. They use a pressure-detonated type.

A. They take a bamboo thing and wrap it with wire, not very much copper wire in it, and they put a little stick in there. It's a pressure-type thing.

Q. How deep do they bury the switch?

A. I'd say generally between an inch or two.

A2. We usually find them because we have a probe that we have developed with a hook on the end. We can probe around with this quite a bit and find them (long rod probe).

A. There's not enough metal in them to be detected by a standard mine detector. They run right over them. We use these probes in conjunction with detectors and have had a lot of luck in picking them up in the roadways.

Q. You're sure they're not burying them more than three inches?

A. Generally, this is what we found.

A2. That's our experience in parts of our area of operations. In other words, you get a certain type of enemy in that area that makes a certain type of mine and uses it in that area, probably by units. You go to a different area, you find a different type of mine.

A. Up here in the Ho Bo Woods we found a lot of standard rounds six or eight inches high, antitank mines, with a tilt rod or pressure-type device. However, in the Cha Loc area, which is off to our west, we ran into mostly nonmetalic antitank mines. They're either in crops or in the brush. If the enemy doesn't choose to initiate any activity, meaning he's not going to attack us or anything, he concentrates on mining. We have to use the roads or we have to use the area where he puts his mines. Then we get casualties from mines. For a two-month period in one AO, we got about 90% of our casualties from mines.

A2. These mines are large enough to flip a track right over on its top.

Q. About what size mine is this?

A. Thirty to 50 pounds in explosives.

A2. Sometimes even more than that.

Q. What would be the next most troublesome mine or boobytrap?

A. Metalic tilt-rod detonator, antivehicular device.

A2. It's an antitank device. They take an M1 shell, split it four ways, and put it over the cap. As you peal it off, it drops a detonator down. It's spring-loaded like a plunger.

A. They vary in size from 10 pounds to as much as 40 pounds. Most of them are circular, about a foot across, 8 to 10 inches deep, and are buried far enough under the ground so only the tilt rod protrudes. As you bend it or break it off, the plunger drops and strikes the detonator. It takes very little force to do it. A man stepping on it can activate it.

Q. How far do you have to bend that before it goes?

A. Well, they're homemade and it's not certain when they'll go. You're never sure.

Q. What would you think would be the next most troublesome item?

A. I'd say boobytrapped artillery.

Q. Is that U.S. ordnance?

A2. Yes.

A. This comes in a variety of forms, varied mostly by the detonators. Such things as butterfly bombs or this bomblet, CBU's--the Air Force ordnance--can be used as a detonator and put on 155 shells. We most frequently encounter the boobytrapped shells, boobytrapped ordnance.

Q. What would be next?

A. We run into pressure mines, the standard manufactured large antitank devices with a pressure plate on the top. I'm rating these according to the casualty-producing effects. Anytime something rolls over the top of these, when it hits a track, it normally gets everybody on the track by fragmentation. The next thing would be your boobytrap, or these CBU's or small devices used on trails.

Q. How about Chicom grenades?

A. Yes, Chicom grenades, too.

A2. They all fall into the small boobytrap category. Unless you've got it in your hand, it doesn't really hurt you.

Q. So this is sort of a miscellaneous category you're talking about? Of course, the CBU would hurt you, I'm sure.

A. Yes it will, but it doesn't have a great bursting radius. If you hit it with a track, it's hardly noticeable. Or hit it with a Rome plow and it just scatters off the blade.

Q. Are there any other items that you figure are worth mentioning? Do you run into anything like these toe poppers?

A. Never. We normally just run over those with the tracks and you never know it's there.

Q. But when the men are afoot, do the nonexplosive-type mines give you any trouble? You know, the punji pits and this sort of thing?

A. Yeah, we have stepped in punji pits. It's not a common casualty on that type of thing.

Q. You don't consider that in the same category with these others?

A. I would say that would be our last priority.

Q. On which type of operation do you suffer your most casualties? Is it on a search and destroy operation, a road clearing operation, or a pacification operation, or what?

A. Well, in one AO we used a lot of people clearing a road and trying to keep a road open for use. I would say search and destroy operations would be next. Last would be wood clearing with the Rome plows. That's when we have a specific mission to cut down the woods. Obviously we can't detour

the mines even though we know they're there. So we have to clear it and then plow through the area.

A2. In this type of terrain, when you're in this thick stuff, mine sweepers get tangled up in the bush.

A. Pretty impractical.

A2. We use the plows most of the time and the blade will strike it or it'll blow a hole in the blade. A lot of times the driver will get out, shake his head a few times, and then climb back in and take off. I'm sure this is very disheartening to the VC. This big monster rumbles around there hitting mines, and the driver shakes his head and off he goes.

Q. In other words, many of those don't really cause you serious damage?

A. We hit 15 AT mines yesterday and sustained one casualty which was a broken ear drum and minor damage to four plows. They'll be fixed back here and put back into operation.

Q. They're all antivehicular mines?

A. Right.

Q. Are you using those extended laterals to drive from on top of the APC's?

A. Right. We are the ones that developed it and we use it quite extensively.

Q. So when a man hits a mine, he's on top. It gives him a jolt and throws him off?

A. Yes, it throws him off. He might bust an arm or a leg or get scratched up.

A2. If a man steps on an antitank mine, you get a tremendous over-kill. It kills him, but it doesn't do too much to the people around him because there aren't many people around him, theoretically. If an APC hits a mine, that's when we sustain our greatest casualties. An APC's a fragile vehicle compared to a dozer or a tank or something like this. They normally ride eight people on it, or the vicinity of it. If you're inside the track or on the track and not driving, you're certainly more vulnerable. They get all this fragmentation that smashes around the track and it causes a lot of casualties.

Q. Now, if we could, let's go back to your road clearing operations. How do the casualties generally occur on a road clearing operation, from mines buried in the road or along the shoulders, or how?

A. Well, again, that varies with the AO. As I said, this is a real school for mining.

A2. In one AO where we encountered the nonmetalic mines, they were very scientific about it. They buried them right in the center of the road and the detonating devices were placed on both sides of the mine or on the side that they desired you to hit it. They were well measured and you could tell what type of vehicle they were shooting for. After it was detonated, there was just enough of a delay factor for it blew up in the center of the vehicle. It was very effective.

Q. Then your main casualties would be from mines buried in the road?

A. In that particular area of operations, yes. Now here, they use mines extensively on old roads. The shoulders and hedgerows have them.

A2. The U.S. troops are no better than anybody else. They try to pick the easiest spot to go through, and when they do they usually run into mines.

A2. They put them in an old tank trail knowing that you might use it again, or use them in defensive perimeters around their base camp.

Q. Are command-detonated mines encountered on a road clearing operation fairly frequently or not as much as these others?

A. It happens, but it isn't too frequent.

A2. We haven't run into those as frequently as we have the bamboo pressure detonated mines.

A. We do encounter command-detonated mines in defensive VC base camps. They're usually detonated in a base camp before you have a chance to look for them.

Q. Have you ever picked up the wires?

A. With mine sweepers?

Q. Yes.

A. Not much.

A2. We pick them up with these hook probes, by hooking along the shoulders of the roads, more times than we do with sweepers.

Q. Are they very careful in the way they bury them?

A. Again, it varies with the VC unit in the area of operations. If you get a unit that's experienced and schooled in the use of mines, they're damn tricky.

Q. In the vicinity of base camps, are these generally on the paths leading into the camp?

A. Generally, they're on the best avenues of approach into that area and they're set up throughout the area.

Q. This is before you get into the entrance of the camp itself? Then do you usually encounter them right at the entrance?

A. Yes, usually in a circle around the entire camp.

A2. It's just like we would set up a defensive perimeter. They use mines, boobytraps and stuff to protect their little base camp.

Q. Now once you get into the base camp, do you find them in positions around the inside?

A. Not normally, unless the enemy has withdrawn or plans to withdraw.

A2. Let's say you come into a base camp one day and you get hit with all this stuff around it. But if you come in the next day and he's left during the night, it'll be boobytrapped inside. You'll find extensive use of the CBU's, grenades, and all this junk we talked about inside the bunkers.

Q. He leaves all this in his living quarters, etc. How about the tunnels in the area, or food, or ammo caches? Do you generally find them there if he's abandoning the area?

A. Yes, they're usually there, too.

Q. But otherwise, you wouldn't find them if he's still manning it and you moved in on him too quickly?

A. Very seldom does he mine something that he plans to use himself.

Q. Any other places near a base camp that we didn't mention?

A. No, I think it's generally on paths and trails leading into the area.

Q. When you move through the jungle, where do you normally encounter your mines?

A. I would say base camps mainly.

A2. You don't normally find them out in the middle of the jungle unless they're trying to protect something in that particular area.

A. Occasionally we'll find them along an old overgrown road or in an occupied area, something like that.

Q. Probably along a trail or some kind of road that they figure you might use?

A. He doesn't indiscriminately seed a big plot of ground. In a big open

clearing that he knows you're going to cross, occasionally you might find a mine. We have found several mine fields just layed out in an open field.

Q. No reason for it except maybe as a suspected LZ?

A. Two of them were mined, I remember.

Q. But if you were moving through the jungle and there was a trail, he'll normally put it on the trail?

A. Normally on the trail and aim it for the armored personnel carrier or mechanized vehicle of some sort.

A. Again, Charlie's pretty scientific about the thing. If you're going to use a well-developed road and he knows it's used, he places his charges to blow-up what the road is used by. If it might just be used as a navigation lane, he places them all around, all over the sides hoping to catch anyone moving by it.

Q. Do you find many in the vicinity of villages?

A. Well there's one particular village that comes to mind that was just littered with mines. But normally you would find them, depending on which way you were coming, at the entrance or exit, none in the village itself.

Q. So actually, if there are people in the village you don't really find them in the houses to speak of?

A. A lot of times you find a trail that's used and on either side of it might be a trench line going back. Right at that particular spot where everybody comes in and tunnels across is where you'll find them.

Q. That would be more or less at the entrance to the village then. Now on the fuzes for these things, are they normally the instantaneous or delay-type fuzes?

A. We encounter both.

Q. Which would you say you're encountering the most?

A. Instantaneous, about 80%.

Q. What kind of initiating action do most of them have? Is it pressure, pull, electrical, friction?

A. The device we run into most is a tilt rod, pressure-release device. It's a dual device. It has a fuze in this portion of it and it's inserted into the mine. The upper portion of it is a rod that's been put on there. It

can be a bamboo stick over a shell casing. It also has a V-ring pull device in there underneath this tilt rod so you can either activate it by bending the stick at the top or you can put a trip wire in this part here. By pulling it out you might also activate it.

Q. Either way it's a tension release?

A. Right.

Q. Now what would you say would be the next most frequent initiating action?

A. Electrical, then just pressure, and then your trip wire devices.

Q. Do you run into many chemical or friction types?

A. No, I don't.

A2. I don't remember us ever running into a chemical or friction detonator at all.

Q. I'd like to talk about the primary means that you have of detecting these things. Do you detect most of them by visual means, or by your mine detectors, or by what we call tactual means?

A. All those nonelectrical types are detected by visual means solely.

Q. On this visual detection, do you do it by seeing signs, seeing the triggering devices, or what?

A. On the tilt-rod-type thing it's pretty evident you can see quite a bit. You see the tilt rod sticking out and if you look at it carefully, you see the base of the tilt rod. You'll see the stick and many times you'll find them by seeing the tilt rod itself.

Q. The original clue is the triggering device?

A. Right.

A2. The tilt rod mine has to be placed so close to the surface that if it's left there any length of time, normally you can see part of the mine itself by looking.

A. The drivers have gotten pretty good at that.

Q. What would be the second most frequent way? Do you see the mine itself, do you see signs put up to warn the local people, or what?

A. You see the mine itself.

A2. We find a lot by probing. I'm sure you're familiar with the old ammunition cases where you had those long rods. You can sharpen the ends of them. We have these straight probes and others with hooks, and we have the mine sweeper team. With this team we'll usually put out security. We have a team inside that probes for wires and a team outside that probes around trying to find the mine.

Q. Do you put the hooks out in the front or on the side?

A. On the side.

Q. Do you see many of these signs put up to warn the local people or the VC's?

A. Yes, but I don't really consider that a way to find mines.

Q. Doesn't that kind of alert you to the fact that one is probably near by?

A. Yeah, it also alerts you to the fact that sometimes they want to slow you down. Just make you do it but it really isn't there.

A2. It really isn't found there. Just because there's a mine sign there doesn't mean there's a mine. They do that so frequently that I don't really consider it a way for finding mines.

A. But, of course, if you see one, you have to check it out.

Q. I was thinking of when you're moving through an area and you don't see much but due to the tactical conditions or seeing some sign,it would cause you to look more carefully?

A. Well, seeing a mine sign would cause me to look for a base camp or some fortification because they don't put the mine signs there for us. They put them out for themselves. As opposed for looking for mines, I'd look for habitations.

Q. Then visual means would be your main way of detecting? Would mine detectors be your secondary method over all?

A. We try to use the mine detector any place that's feasible. We have had very good luck. We use them but we never use them by themselves. We use them in conjunction with probing and visual methods of finding a mine.

Q. So with probing it would probably be your number two way?

A. This would be almost strictly for road clearing and open terrain, where you can actually employ it, as opposed to wooded areas.

A2. The mine detector is just useless in the jungle.

A. It catches on vines.

A2. It's too cumbersome. It's just inadequate. It doesn't find where they place the mines.

Q. One of the engineer sergeants was talking about trying to get them to develop a thinner detector head so that you could stick it in this brush where you can't your wider head. Do you think that would help?

A. I'd say, if it was going to be thinner, it should be pointed.

A2. To be practical, you need something to detect the mines that are farther away. You need something with a detection range of two or three feet.

A. Theoretically, the one we're using now has a four-foot diameter.

A2. No, I mean range--distance from the detecting device to where the mine is.

A. Right. The P-153 supposedly is able to pick up anything within two feet on either side of the center.

A2. It doesn't.

Q. Approximately how far do you have to have it off the ground itself?

A. Well, they say three to five inches is where it's supposed to pick it up. You can go as high as eight inches in a high-metallic area where there's crap on the ground. Any signal you get there will be from mines. Now the nonmetallic mines you'll miss. Theoretically, according to the way the thing was designed, you should be able to pick up metallic mines.

A2. That's what I'm saying, you need a larger detection distance. For instance, if you had a mine in a hedgerow, you should be able to detect if from here to that post away from it.

Q. Well, if you had to design this thing, what type of radius would you want?

A2. I'd want a three or four foot stand-off distance, to be able to pick it up three or four feet away.

Q. In a company, do you use any other source of detection to help the men on a search and destroy operation--like dogs, or any special mechanical equipment?

A. We have used dogs and some of them, when they're well trained, pick up not necessarily the mine itself, but the fact that there have been people in the area. As a result of that, we've been able to find mines and booby-traps.

A2. I tried to tell them that you cannot have just two or three minutes to find them unless they're close to the top of the ground which they are not. If they were to put out a mine tonight and we were to make a very

careful ground search, I would guess that we would still miss it. But you find a lot more mines, of course, if you take your time and very carefully check everything that's suspicious.

Q. How often do you have this time?

A2. Very seldom. The only time is when we have already encountered several in the area. Then we try our best to find the rest of them.

A. They use all types. They use a lot of nonmetallic mines and mines buried a couple feet.

Q. Do you have any techniques for detecting or neutralizing command-detonated mines?

A. When they are placed in conjunction with roadways, we try the hook probe.

Q. In other words, like a grappling hook?

A. We throw grappling hooks in hedgerows. We tried long nylon lines with weighted plugs, the same type of device.

A2. We're always trying to pick up the wire.

Q. Do you recon by fire?

A. Yes, with the 50's extensively, and on rare occasions it's detonated mines.

Q. Do you ever use indirect fire?

A. We usually prep everything we do.

Q. Do you feel like this is somewhat effective?

A. We feel certain that this has detonated quite a few mines, but we don't have any way of proving it. We use indirect fire normally as a measure to keep the people back. Primarily it keeps the mines from being layed, cuts down enemy movement so the mines can't be layed, as opposed to detonating the mines.

Q. Of these systems, which do you use most?

A. We use a preparation with indirect fire and direct fire weapons in everything we do. That's one of the reasons we use it. As an actual mine detection method, we use a combination of detectors, grappling hooks, probes and such.

Q. Do you ever do any night mine detection, breaching, or anything like that?

A. Oh, yes. We operate essentially as anybody does at night. In the first place, we seldom have something layed like a standard mine field that we can really breach. This detonation of isolated mines is a different thing.

Q. If you're on an operation and you come across a mine or boobytrap, what is the sequence of action that you take?

A. If we're moving in a formation where there's a front and a rear, the lead person normally encounters the thing. If he doesn't hit it, he normally tells the CO and marks it.

Q. How do you normally neutralize it?

A. Blow it up.

Q. You never attempt to disarm it or anything?

A. No. We've had some very unfortunate incidents because of that and our policy is to blow it in place and quit screwing around with it. One guy goes out and does it so there isn't a big conglomeration of people around there.

Q. Do you request assistance from accompanying engineers?

A. We have a platoon of engineers with the battalion. We normally have a squad with each company, along with demolition equipment.

Q. That's the people that normally blow it?

A. Normally, my scouts don't have engineers. We give all our people in the company demolition training. So we do have people that are qualified to blow it.

Q. You don't ever bring in engineers or EOD people to do this?

A. Oh, yes. Now if I find duds and stuff like this around the area, we'll bring in someone to blow the mines. Other than that, we'll place a charge on it and go ahead and blow it.

Q. Do you by-pass these things for any reason, say, if you don't want to reveal your presence or for lack of time?

A. Sometimes we'll mark them. On a lot of occasions because of lack of time we do just mark them.

Q. Now do you ever avoid them because you might receive more casualties if you fool around with them?

A. No.

A2. Any we find the easy way, we do not by-pass. Now the unit that found it may have to by-pass it. They might be maneuvering to attack or something. But they'll throw toilet paper or smoke there and they always report it. They'll always give instructions to their follow-up unit or, if they haven't got one, to us so we'll know where it is when we go out to get it.

Q. Do you require these reports to be sent up to brigade?

A. Well, we report all contacts, including mines.

Q. Including mines that you by-pass and don't blow?

A. Well, there aren't any that we finish up by-passing and not blowing. We might by-pass some of them and wait for somebody else to come along and blow it, but we don't go off and leave them.

Q. Do you have an SOP on this?

A. Yes, that is our SOP. I'm not talking about reporting, but by-passing. You might have exceptions to this, but very rarely do we ever make an exception.

Q. On this immediate reporting, the word is passed to the unit right away I suppose?

A. Yes, as soon as it is found, it is passed to the company commander and he reports it to us at battalion normally before it's destroyed.

Q. In the follow-up reporting, are you required to use any kind of written form to turn in this information?

A. If there's something spectacular about it--if there's a known mine field, a special way it's rigged, a new way, some indication of special booby-traps.

A2. If you hit 15 mines a day and you had to follow them all up with a written report, you'd go down under with paper work.

Q. Do you include this in the after-action report as kind of a lump report or what?

A. Normally in with mine damage.

Q. How is disseminating information usually done? Is it done, say, as intelligence prior to an operation, before you go into an area?

A. Yes, we know there are mines in a specific area and they have been encountered there. We try to collect this and disseminate it to the company commanders prior to an operation.

A2. Whenever we go any place, I always check ahead to see if anybody was out there before and if they found any mines or anything else.

Q. Is this type of information distributed in any regular form, say in a written or verbal form by your higher headquarters?

A Yes, we receive a daily intelligence report, a summary of all enemy activity in the area on the previous day. We have it on file in our headquarters here.

Q. I presume you pass that down to your company?

A. On the specific areas that they are going into, yeah.

Q. I'd like to ask you now about the adequacy of training on mines and boobytraps for your average enlisted replacement. What do you think about that?

A. It's about four hours of mines and boobytraps by the division.

A2. It's pretty good. The engineer battalion over here runs a school on this subject.

Q. I was thinking in terms of men fresh out of AIT that you get?

A Well, I figure that division takes all replacements and runs them through about a five-day replacement course. Now I don't know how they were before they came out of the division's course, i.e., how they came out of AIT. They get better over at the division replacement training center. The crowd that we get has already been through this extra week of training. For a read-out on how good they were coming out of AIT, I think you'd do better to talk to the people over there.

Q. How about you?

A2. Yeah, I think generally that our soldiers, through a combination of training and OJT, are pretty damn conscious about the whole thing.

Q. Do you think they're pretty well qualified by the time they reach you?

A. They're qualified to respect mines and boobytraps, yeah. We don't attempt to disarm them. To blow a mine or boobytrap, all you gotta do is set a chunk of explosive there.

Q. Do you think they're skilled in detecting mines and boobytraps?

A. Well, when you go out into one of these jungle thickets, you'll very rapidly see that it is impossible to move around without disturbing a lot of foliage no matter how careful you are. And when we get in an area where we have reason to suspect there's something like that, like today, they are thinking mines and boobytraps as much as any other thing they are thinking. Now some guys have a knack for picking out the trip wire from the million and one vines in front of them and some people just don't have a good knack for it. It's not just a matter of training. I'd say that they are very thoroughly trained in respecting them and in trying to pick them out. Usually, they feel pretty good about it.

Q. How about the training of the NCO's and officers that you get in this subject?

A. Not bad. Of course, the NCO's also have a chance to polish their techniques when they're out here going up on some road with probes and all this sort of thing. The longer they stay, the better they are. I'd say they are just as good as the young men out there.

Q. In other words, you didn't notice any particular weakness?

A. I think, with this type of skill, if a guy isn't well trained, he rapidly gets well trained. It is all observation, looking and searching. Or looking for places where they're liable to be, like along a trail or something like that. Usually when you come into an old base camp or a base camp that has recently been abandoned or a new base camp, everybody's alert and looking twice as hard because they're usually heavily booby-trapped. They boobytrap their installations and leave them. So when you've got a guy sitting out in the middle of a trench somewhere, he is trying to avoid them.

Q. After the four hours of training at brigade or division, do you give them any follow-up training when they come to the unit?

A. Some of the people who reach our company go on an allocation basis to the engineers and to a mines and boobytraps school.

A. All of our replacements go to that replacement school.

Q. Where is that engineer school you're speaking of?

A. This is one run by the engineers on mine sweeping for the brigade. I was over in the engineer battalion before I came over here and I told them to devise a course for NCO's in these techniques.[1] I guess they finally got down as to what this is going to be. The sort of thing I'm hoping they're teaching is to always destroy them don't try to disarm them. It's simple. When you've got one, get the rest of the people away from it, you know, simple stuff like that. After we have found one the easy way, there have been some incidents in the division where we still had casualties because people will see a mine out in the road, not a boobytrap, and the first thing they'll want to do, with six guys around, is stand there and look at it. This gives you six times the chance of blowing it up, hitting the detonator. Then if you do hit it, you lose six times as many people. So the simple point that I'm trying to get across to everybody is this. If you found the thing, one guy goes up, puts a charge on it, and blows it up and everybody else stays well

[1] This answer is by the CO of 4/23d Mechanized Battalion who had previously been an Engineer officer but is now Infantry.

out of the way. It just seems to be human nature, or curiosity, when you find a mine out in the road to come up and stand around that thing and look at it, as if they were being brave or something, which, of course, they aren't. They're just being foolish. That's something that your junior leaders on the spot have just got to really keep after these people about.

Q. Then you do have a mine detector school at brigade. How long is that, two days?

A. Yes, two days.

A2. It's one day right now.

A. No. I think it's two. I've got 36 people going for two days.

A2. I'm not sure we're both talking about the same thing.

Q. There's no advanced training for selected personnel or NCO's as such right now, but you're hoping for some, is that it?

A. Well, I don't know. You'd have to ask at brigade about that.

Q. Any recommendations for improving training in mines and boobytraps in the States or over here?

A. Well, I take it that they are introducing into their training the type of mines we're finding. That's an obvious recommendation. The one we're finding that's causing us the most trouble is the plastic bag full of explosives. It's just like a clothing bag you get from the dry cleaner. They just fill it up with explosives and bury it. And the only metal part you have is the blasting cap and normally it's fired by a bamboo detonator. I'm certain there are plenty of these tilt rod cans turned in. You ought to be able to get some of them. It's nothing they can't fabricate themselves because it's only tin in place of a detonator.

A2. These two are the principal mines we find in this area. Up north they have found more of a standard Chicom Army mine.

A. Of course, they'll take anything they can get their hands on, 105 round, 155, etc.

Q. Do you have anything further on in-country training?

A. No, I think you've got to get the soldier into the unit. The older men can show him how.

Q. Mostly OJT then, right?

A. They're supposed to come trained, but division takes a week and trains them some more. I think by then they're okay.

A2. It'd be a great help if the stateside training centers could take some of the load off the local people by having them better prepared when they get here.

Q. Would you see any advantage in having the people coming over here after AIT, sending them out for a month or two till they get really aware of what's going on, and then bring them back to give them more detailed training?

A. No. Once we get somebody in the battalion, we are constantly up against this training problem on different things. Selected individuals, yes; they can benefit from this. Just taking a soldier after he's become a member of a squad in a platoon and then pulling him back for additional training would not do, I wouldn't think. I think the idea of periodic courses for junior leaders and squad leaders is a good idea.

Q. Any recommendations for improvement in the things you do in the field, like detection?

A. Well, I guess you have our standard run down on the use of extended laterals and various other stuff that we do.

Q. Yes.

A. Speaking of metallic mines, what we need is a mine detector with a greater distance between the mine and the detection team.

A2. There's no question about that. They've been trying to develop one for about a year.

Q. Do you have one of those detectors in the battalion that can pick up items by density detection?

A2. It never worked very well. There is an old one, a PK64 I think it's called.

Q. Have you ever tried that?

A. We tried that from the standpoint of trying to find tunnels by the density difference. I would say it was very marginally successful. That is to say, if you knew the tunnel was there already, you could pick up a difference if you went back and forth across the space of the tunnel. But I don't think that the attempt was very successful for starting from scratch in terms of finding them.

Q. How about for searching roads with it to find nonmetallic mines?

A. I don't know. There's only one of them and it doesn't work particularly well.

Q. Do you ever run any experimentation in using it on the roads at all?

A. No as far as I know. Most nonmetallic mines that have been found in roads have been by visual means, I would say. Wouldn't you?

A2. That's right.

A. The thing is that around here there are only a couple of roads that we ever sweep for mines anyway. You can't sweep the whole MSR daily for mines. It's just impossible. We always sweep the road from Phu Cat to Tung Lap for mines because it's always mined. You can see the problem. You obviously can't sweep the Ho Bo woods for mines and do anything else. Even if you took a whole battalion of mine sweepers, you still couldn't do it.

Q. You really don't think too much of the PRS4?

A. I would rather defer to someone who's got a wider knowledge of it, myself. I don't believe that it has been considered to be a very satisfactory development because the day they issued it to the troops, they wrote a clause or whatever they call it; a requirements document questioning whether it would work. The thing has never been very successful in detection as far as I know. You might find someone that would say something for it but they're still screwing around over there trying to develop what they call a microwave mine detector. Haven't heard word yet on that and they've been doing that for about eight years. That's more or less a universal mine detector. Something that can get them all.

Q. This microwave was in between this universal, wasn't it? I mean this was supposed to be a development in being right now, wasn't it?

A. Well, they haven't even got the mine detector working right now.

A2. One of the methods of mine detection I forgot about that we have tried recently is by air. We have an air section, and we use planes pretty extensively to hunt out mines. And we have had some success with it.

A. Another thing they do, particularly when they have big air strikes coming into a big area, is try to use a type of bomb they call a "daisy cutter." It doesn't make a lot of holes in the ground. It's explosive force comes out parallel to the ground and they try to use that to detonate mines.

Q. So this is actually recon and blowing by plane?

A. Yes.

Q. Have you run across any kind of a pattern in any type marking systems that they use?

A. Well, we found one VC mark. They place a rubber band around mines or boobytraps or grenades or anything else to detonate the boobytrap, to tell themselves that it is boobytrapped.

Q. I'm talking about anything you see on the trail or road or anything like that, you know, like sticks or rocks?

A. We didn't see much of that.

Q. Captain, when you had a company before you became S2, did you find any nonmetallic mines wrapped in plastic?

A. I don't remember encountering that but about two times, and it was detected both of these times.

Q. Does the soil have a high metallic content.

A. Not to my knowledge, no.

Q. How many detectors did you have in your company?

A. Initially three, then only one operating. We shipped the other two over to the United States for repair. That was six or seven months ago and they haven't returned yet. I mention that only because it's a common problem.

Q. When these detectors malfunctioned, what was the cause of it?

A. Well, I'd say electrical malfunctions was the normal complaint or "reasons unknown." It just maintained a monotone.

Q. What percentage of the sweepers time was lost on chaff--stuff in the road?

A. About half of his time.

Q. Did you have to train most of your sweepers?

A. No, I normally requested trained sweep teams from the engineers.

Q. How about the people you use from your company?

A. Fortunately, I had three good operators who were with me the whole time.

Q. Do you know if they came in qualified or did they learn through OJT?

A. OJT.

Q. How do you normally conduct your sweeps?

A. We normally use a combination of probe sticks and mine sweepers.

Q. How many sweepers?

A. Two sweepers. We always use two sweepers going in the same direction, and two sweeper teams if I can get them. They split the difference on the roads. They can sweep about 1,000 meters in an hour.

Q. If you had to set up training for sweepers in AIT, how would you do it?

A. I'd start with an extensive orientation of what type of things they could expect to find in the area.

Q. How long would you say it would take to do this?

A. It would probably take three to four hours for an orientation on all the different types of things you find here.

Q. Would you have a refresher course like the one they have here once they got over in Vietnam?

A. Yes.

Q. As I understand it, your mech company people very rarely sweep the roads or tunnels?

A. They very rarely sweep the roads. If we go into a new area, we will get our mine sweepers out and check our bivouac area. If we have to move a column any distance at all, we'll have mine sweepers with them. Let's face it, I've been on many search and destroy operations and you just can't wait for a mine sweeper if he's checking out tunnels, hedgerows, or something like that.

Q. You know what type of mine sweeper they use?

A. I'm not sure, but I believe they've got one of these transistorized metallic types.

Q. What are your general comments on these detectors?

A. I couldn't say. Normally when we get to use it, it's pretty good but we use it so seldom except in cases where we've moving into something. For instance, if we're on our way into a night location and some of our people start running into boobytraps some place, then we'll go get the mine sweepers and sweep out the area.

INTERVIEW WITH THE FIRST SERGEANT, A SP/4 AND FOUR PFC'S
OF COMPANY B, 4/23d MECHANIZED INFANTRY BATTALION

Q. Could you tell me what percentage of your total casualties were suffered from mines and boobytraps?

A. No, I don't have the figures and I would rather not guess.

Q. Well then, of the casualties you suffered from mines and boobytraps, what percentage were from mines and what percentage from boobytraps?

A. I'd say about 70% were from boobytraps and the rest from mines.

Q. What type of mines or boobytraps cause you the most casualties?

A. The BLU-3, that Air Force bomblet, is the thing we run into most. Then I guess it would be the tilt-rod-type antitank mine followed by the pressure type mine.

Q. On what type of operations do you suffer most of your casualties from mines and boobytraps?

A. Most of them are on search and destroy operations. Next would be road clearing operations and then after that would be securing the engineers on this woods clearing.

Q. Do you ever find mines or boobytraps in the jungle?

A. Yes, mostly near enemy base camps.

Q. Where do you find them in the base camps, at the entrances?

A. Well, if the VC have left the base camp, you find them around the fishing or living positions and in the tunnels and caches of food and ammo.

Q. How about when you're moving through the jungle, do you find any mines or boobytraps?

A. Yes, you find them on trails mostly. Then you might find them on the sides of the trail or in hedgerows.

Q. Do you find many around the villages?

A. We seldom find them in or around villages where people are living.

Q. What type of fuze does the enemy use most, instantaneous or delay?

A. They use instantaneous fuzes mostly, about 60%, and about 40% delay.

Q. What type of initiating action is used most of the time?

A. They use the pressure-type the most, then pressure-release. Next would be the pull-type with trip wires. Last would be electrical.

Q. How do you detect most mines and boobytraps, by visual means, by mine detector, or what?

A. Most of them are detected by visual means and then would come the mine detector.

Q. On mine detectors, what kind do you have in your company and how many do you have?

A. We have two metallic-type detectors, they are the P-153, I think.

Q. Going back to how you detect mines and boobytraps visually, is this by seeing them, or the initiating devices or signs set up to warn the people?

A. The main way is by seeing the signs set up to warn the local people. Next would be signs of the initiating device, like a trip wire. Last would be spotting the mine or boobytrap itself.

Q. Is there anything else that can help an infantry point man spot a mine or boobytrap?

A. Sometimes when these dogs are going along a trail, they will spot a trip wire and won't go past it. Or sometimes they smell something that makes them stop and this tells us to be real careful. They're very good on this stuff. Then we have these long rods that we poke in the ground ahead of us that help to spot things.

Q. Do you have any special way of detecting and neutralizing command-detonated mines?

A. No, and so far we haven't run into any.

Q. Do you ever attempt to detect mines or boobytraps at night?

A. No, you can hardly find them in the daytime when you can see.

Q. Could you describe the step-by-step action that takes place when your point man finds a mine or boobytrap?

A. Well, the first thing is to pass the word back that you have spotted something. Then an NCO or officer will usually come up to see just what it is. Then they will call the information in to company or battalion. After that they have a demo man come up and blow it in place.

Q. Who do you use to blow this, an engineer or your own man?

A. If we have some engineers accompanying us, we will have them do it. But most of the time we use our own demo man from the company to blow it.

Q. Do you ever by-pass these things after you find them because you may not want to reveal your presence or due to lack of time?

A. When you're in a mech unit you can't very well conceal your presence. But we do by-pass it with the lead elements sometimes, due to lack of time. In this case, we always mark it and pass the word to someone else behind us who will blow it later.

Q. What method do you use for reporting information on mines and boobytraps?

A. We pass the word back verbally to the men in the company and they usually call battalion by radio to report it.

Q. Do you follow this up with a written report?

A. Yes, we do this on a form if it's anything special.

Q. How is information on mines and boobytraps disseminated to the troops?

A. Sometimes before we go into an area we get some information on what's in there with our operation order. Also, we get information now and then from higher headquarters about enemy mines and boobytraps.

Q. What do you think about the average replacement's training in mines and boobytraps when he first arrives in Vietnam?

A. Well, they need more training, but no matter what you do they will still need more OJT before they are really ready.

Q. How much training do the replacements get now on mines and boobytraps when they first come in?

A. They get four hours training at division in mines and boobytraps during that week of school.

Q. Do they get any follow-up training when they get to their company?

A. They get some when time is available and we are where we can do it.

Q. Is there any advanced training for the men or the NCO's?

A. They do have some training for certain men, but this depends on the platoon sergeants and what they think the man needs. The NCO's don't get any special training.

Q. Can you recommend any improvement for mines and boobytraps training in the States?

A. I think that in their training they should try to show the men the environment that the mine or boobytrap is used in. Try to give them some clues as to where to look and what to look for to help the men to detect them.

Q. Do you have any recommendations to improve in-country training?

A. No.

Q. Could you describe any marking systems the VC use to warn the people about mines and boobytraps, like crossed sticks, rocks and so forth?

A. I've never seen any of these crossed sticks. All I've ever seen are these picture and mine signs they set up.

INTERVIEW WITH THE ASSISTANT S3 AND OPERATIONS SERGEANT
OF THE 1/27th INFANTRY BATTALION

Q. I'll start by asking what percentage of your total casualties, would you say, comes from mines and boobytraps?

A. About 10 or 15 percent.

Q. Of these, what percent would be from antitank and ant'personnel mines, and what percent would be from boobytraps?

A. Well, we've had very little trouble with antivenicular mines. Ours is strictly boobytraps.

Q. That would be about 90% boobytraps?

A. Easily, yes.

Q. Could you give me a priority listing of the ones that are the most trouble to you?

A. It would be tin can or junk mine with a grenade in it.

Q. Where the grenade is pulled out of the can?

A. Right.

Q. And that would be No. 1 as far as you're concerned?

A2. It's the one where you hit the trip wire and it pulls the grenade out of the can.

A. It's strictly a junk mine.

Q. How about the Air Force CBU or BLU-3?

A. Once in a while we run across 105's that are rigged up with them.

Q. Is U.S. ordnance your next biggest problem? Any others that you can think of that are particularly troublesome for you, like the cartridge trap or anything like that?

A. We didn't run across it.

Q. How about the nonexplosive-type stuff like the punji pits? Does that give you much trouble?

A. No, not a hellava. Let's see, in the last nine months I think this battalion has hit five of them.

Q. Then punji pits are a minor problem?

A. The good thing about them is you get to see them so soon.

Q. Then from what you said, your main problem occurs on search and destroy operations because that's what you do most. Would 80% of your casualties come from search and destroy operations, or what percentage would you say?

A. You could say 80% with no problem. It'll run quite a bit higher than that.

Q. Do you ever get these road clearing missions?

A. No, we don't have them.

Q. Do you have to secure the road for clearing teams?

A. We've secured for road clearing teams and tree clearing teams. During these periods, of course, our problems change the other way. We run into road mines and large antivehicular mines that they plant in the trees to stop the road plow. But hell, they're so obvious to a man walking on the ground that we never did detonate any of those.

Q. You really didn't have that much of a problem, although you did encounter them.

A. Right, we did.

Q. How about on pacification operations, or have you done any of that?

A. We've done quite a bit of it but we've never had anything other than the minimum of problems. It's always been with the same old boobytrap.

Q. Could you tell me under what conditions these things are encountered? Are they generally in the jungle, near a base camp? About where would you usually encounter this thing?

A. On the approaches to the base camps, primarily. This is one of the things that you never know until it happens to you because you're damn near in the base camp before you know it's there.

Q. Do you find them in the trails leading in to the camp or adjacent to it or right at the entrance?

A. No, when you get up close, the problem with mines is over with.

Q. Inside the base camp you see very few, is that right?

A. Very few in the base camp.

Q. Unless perhaps they have abandoned it?

A. We spent three weeks in the triangle going through old abandoned VC base camps and never did run into a mine. We didn't happen to run into any at all.

Q. Do you find any when you're going through the jungle?

A. Sure, along the trail.

Q. So generally, if you do find them they're along trails?

A. Or places where you're getting close to one of their base camp areas.

Q. If you're off the trail, moving through the vegetation, do you find any?

A. Not too often unless it's in hedgerows, like bamboo or something like that. Then you run into them quite often out in heavily overgrown fields.

Q. When you're securing a road clearing operation, do you find them off the road or on the road?

A. Normally, on the road.

Q. Usually buried in the road rather than along the shoulders. Now you were talking about some command-detonated stuff a while ago on the side, weren't you?

A. Yes, as a matter of fact, on one of our moves coming back in, someone detonated a 105 round beside the road. We had three hurt by it.

Q. What kind of fuze does the VC use most often, instantaneous or delay?

A. Well, it depends on the area and the kind of mine. The one we encounter most is the boobytrapped hand grenade and here you have a couple of seconds delay. Like Alpha hit two of them in one day and didn't have any wounded because they heard the striker and they got out of there. The second type is the boobytrapped grenade. It's most common around this AO here. When you get up around the Bo Loi area, you hit the command or the stick mines, which are primarily for the vehicles. But they're pretty indiscriminate when they blow up and there's no warning whatsoever. You hit one and that's it. Then the third type is command-detonated, and there's one particular area where we've encountered these. Only once have I seen these used extensively and that's just north of here. We've been in there on three different occasions and on three different occasions we hit command-detonated 105's. So we have come across all types, to answer your original question about what type.

Q. I was just trying to get a general feel for the type of fuzes they use.

A. It's usually a regular grenade fuze.

A2. Usually the trip wire's hooked to the ring. You kick the trip wire and you pull the pin. It pops and you hear it.

Q. It's a delay-type normally?

A. There's a delay on that.

Q. What type of initiating action do they usually use to set the mines and boobytraps off? Is it a pressure-type, or a pressure-release, or a pull-type?

A. I think the 105's were electrically detonated, but I'm not sure about it.

Q. What's the most common type of initiating action?

A. It's like I said, a junk mine where you've got a boobytrap and you pull the grenade out of the can. This is a pressure-release--as soon as you pull it, the striker will be released.

Q. Then what will come next?

A. Well, the stick mine.

A2. No, we don't run across them too much.

A. Well, no. We normally hit stick mines in Bo Loi and we have never had the qualified personnel to disarm them. When we see one, if we don't hit it ourselves, we blow it in place.

Q. How do you generally detect these mines and boobytraps? Is it by visual means, by mine detectors, or what?

A. As a rule we don't use mine detectors when we go out on our sweeps.

Q. So visual would be your No. 1 means?

A. It would be No. 1.

Q. Within visual, what are the signs that tip you off to a mine being there, the signs they put out to warn the local people or the signs of the triggering device?

A. Sometimes you do see these warning signs.

A2. Not in all cases, though.

Q. Do they give you any kind of clue where the mine or boobytrap is?

A2. If you get in a village and you see these signs, you can probably

anticipate that they're there somewhere. The VC in the area put them in and they know where they are.

Q. What is the thing that usually tips you off that there is a mine there?

A. When you hit it.

A2. One other way is when you go through hedgerows. We sweep the hedgerows primarily, and this is where we hit the majority of our boobytraps.

Q. It's a logical area for them to be in and you take extra care and maybe find them before you hit them?

A. After a while it gets pretty obvious. We're bound to see a wire before the wire gets us, especially if we're in an area where we expect to be running into them.

Q. So he sees this wire device and then he looks further. Then would you say seeing the mine or boobytrap itself would be the second most frequent method by which you find them?

A. Yes.

Q. Do you have any special techniques for locating or neutralizing command-detonated mines?

A. The brigade commander wants us to use the grappling hook particularly when we're in what is obviously a heavily boobytrapped area. Normally we find them in the hedgerows. We have used it on a recent operation a lot. A mechanized unit, I understand, has used it with relative success.

Q. Do you use any recon by fire, either direct or indirect?

A. Yeah, but that wouldn't be for boobytraps. You have to be very lucky to get any boobytraps that way.

A2. For example, an area not far from here is boobytrapped. You can't go in 50 meters without losing some men. They have fired artillery in there for an hour before trying to go in.

Q. I was thinking primarily of ways to counter command-detonated mines here?

A. Oh, this we have done. In fact, in this area I was telling you about with the command-detonated 105's, we reconned every hedgerow there one day, and we found four command-detonated 105's.

Q. Was that recon by direct fire?

A. Yes, direct fire.

A2. We ran the guy out that was supposed to be punching the button.

Q. Do you ever do any night detecting of mines or anything like that?

A. A couple times we could have, but never had the method of doing it.

Q. I'm just asking because it's listed in some of the training in the States.

A. Dogs are supposed to be alert on boobytraps, but I don't know how true it is or how effective it is.

Q. Could you run through what would normally happen after your point man discovers a boobytrap?

A. He marks it and we blow it with some C-4.

Q. Does he normally pass the word back to somebody?

A. He reports it and then we report it to our headquarters: the type booby-trap, type trip flare or trip wire. If it's not a hand grenade, which is what we usually encounter, or if it's unusual, we supply headquarters with the description of it.

Q. You normally just blow it in place?

A. Right.

Q. If you have engineers with you, do you use them to blow it or do you have demo men?

A. If we have engineers, we use them.

Q. You don't request anybody to come in and blow it?

A. No.

Q. Do you ever by-pass it because you lack the time or need to keep your presence quiet or anything like that?

A. Yes, then we mark them. Especially when going out on an ambush patrol at night, you wouldn't blow it on your way out. You'd hold out until the morning.

A2. I can't ever recall by-passing a boobytrap that we didn't blow later. We may have, but I can't recall it.

Q. On this reporting of mines and boobytraps, I assume for the members of the unit you just pass the word verbally and radio to your next higher head-quarters. Do you have to follow this up with any kind of a written report or anything?

A. No written report is required unless the boobytrap is really unusual. Then it might be required.

A2. If you had a follow-up written report, it would be reported at the end of the day.

Q. Included in an after-action report?

A2. Yes, a daily after-action report.

Q. How's this information about mines and boobytraps disseminated between units? For instance, do you get intelligence on an area before you go in there?

A. We know the boobytrapped areas in our AO as well as anyone. If we're going into a boobytrapped area, we'll be given the information.

Q. Do you get any kind of a verbal or written report from higher headquarters that builds up your knowledge of mines and boobytraps in the area?

A. Oh,yes. Just about monthly we get a report about mine fields. They describe how many, what location they're in. Otherwise, it's just general information concerning mines.

Q. Who does that come from?

A. Reproduced here and comes from USARV.

Q. I presume this is passed down to the units from the headquarters here.

A. Yes.

Q. What do you think of the men's training in mines and boobytraps when they come here from the States?

A. Some of the troops come here and they go through this mine and boobytraps course up the street and blow up every one in the course.

Q. They trip them all?

A. Every one of them.

A2. Then other guys come through and don't trip a one.

Q. This person's more skilled?

A. No, there's only so much you can do to tell where a boobytrap is. If he stays alert when he's looking for it and if he knows enough not to touch it,

then there's not too much else you can teach him. There's nothing really clever except the camouflage. Once they hit a boobytrap when we're out on a sweep, the first boobytrap they hit that gets somebody, usually the next four or five mines are found before they are blown.

Q. In other words, people get more alert?

A. And they know where to look for them.

Q. Do you have any comments on the condition of the average replacement when he comes here?

A. I was capable of hitting one every mile when I first came here.

Q. NCO's and officers, Do you have any comments on NCO and officer training when they get over here?

A. No. A boobytrap is just something that happens to you, period. You can be walking out the front door and if Charlie laid one out there and it's your turn to hit one, you will.

Q. Don't you think you can train to increase your capabilities to detect it?

A. We could.

A2. Really, I don't think so.

Q. What we're looking for are some procedures that they can give a man in training that give him an idea of generally what to look for. Then when he comes over here, you can tell him what to look for in your area.

A. Never move a piece of brush or lean on a tree. If there's a piece of brush lying down alongside the trail and you're in a boobytrap area, you can damn well depend on it being boobytrapped. Only a few times have we had anybody move them, and the ones that moved them got hit.

Q. When a replacement gets over here he gets four hours of formal training up here in your division school, I understand. Does he get any follow-up training in the units on this, other than OJT?

A. No. We don't really have time to start another school right on top of that one.

A2. It's not a problem of time, it's what can we teach him to help him uncover the mine or boobytrap before it hits him. We don't know what else to tell him except to stay spread out, stay alert, and move slowly in a booby-trapped area. Other than these basic things that they learn their first day in the field, I don't know what you could teach him.

Q. Is there any advanced or additional training that the man gets while he's here of any kind? How about mine detector training?

A. We have formal schools here on mine detectors.

A2. When you have boobytraps wherever it's practical is where we put our mine detector.

Q. Out in the bush?

A. Right.

A2. You can only clear a certain area. If you're sweeping, everybody follows the man with the mine detector or everybody carries a mine detector.

Q. Did I understand that you only have one in your unit?

A. No, we have three. Two belong to the communications section.

Q. Do you have any recommendations for training the men in CONUS or in-country? Any ideas?

A. I don't see how they could train them any better, not in this particular field.

Q. Any recommendations for improving the actions that you take in the field in the way of detection and reporting or disseminating information?

A. I think the system that we use now is pretty good. The main thing is to avoid hitting them.

Q. If the training time on conventional land mine warfare in the States was reduced and this time used on a realistic jungle boobytrap course, do you think this would prepare the man better?

A. I'm satisfied with them. Somebody said to the brigade commander, "I can tell your troops how to avoid mine fields on operations. Give them all the time they require."

A2. Time is nothing.

Q. What I'm trying to say is, would you suggest training in rough terrain like over here in AIT where they have the time and facilities, do you think it would help?

A. Sure, even if it were nothing out a repetition or a copy of the school we have right here. The repetition is what helps, because when he completes that one and then he completes this one, he's going to recognize it quicker when he sees it.

Q. This is what we're trying to do, to make the point that training in the States needs to be oriented toward Vietnam in AIT and not conventional mine warfare.

A. They've been through the standard mine field course in AIT, but, of course, we don't use mine fields and we don't run into them. We run into boobytraps. We could use more time with the boobytrap course, I'm sure. At least in recognizing them and learning how to evade them. It doesn't do any good to teach a man how to put them in because we're not allowed to do that either.

Q. Do you run across any marking systems that the VC use over here that would help anybody to detect them?

A. You run into them, but they vary. They'll vary from village to village in the same province. Some people use a few little sticks piled up with one of them pointing to the boobytrap. They sometimes use strips of cloth tied to trees.

Q. Would the value of them be that they alert you to the possibility of something being near by?

A. Yes, even these little signs help. About 55% to 60% of the time that you see the sign and move up to it, there's nothing in there. At least, I've never found anything. They're marked with straw seeds in rice paddies, twigs in wooded area, rocks where they come to places where there are such things.

Q. Any other ideas on how to improve the mines and boobytrap training?

A. Well, we find out most about mines from civilians. Not so much because they care for us but because they are aggravated that the VC put them in the villages. When you come into the area you have your interpreter talk to them and find out how they have the area boobytrapped. Sometimes they'll tell you, hoping you'll remove them because it might save them from tripping them. As far as detection, being alert and staying spread out is the only method we have.

Q. Did you have any experience in a line company before coming to the battalion staff?

A. I had 4 1/2 months with Charlie Company.

Q. How many mine detectors did you have in your company?

A. None.

Q. Did you have access to any?

A. We give them mine detectors from battalion and let them use them.

Q. If you could get them, what type would you get?

A. PRS-3, PRS-4.

A2. I'm not sure, but I think the battalion is authorized the PRS-4 and all those are allocated to the reconnaissance platoon whose mission is to sweep roads. We could use those, as far as that goes, but anywhere on the road is impractical. On the road now I suppose it could be used very effectively, but even the mech operations were slowed down considerably if they used sweepers.

Q. You never did actually use mine sweepers?

A. I didn't.

Q. Was anyone trained in your unit to use them?

A. Yeah, periodically. We just had three men trained in each company this week on the use of the mine detector.

A2. Clearing roads or something, the detector's outstanding. It clears roads very effectively. When you are out in the boonies, it's not worth a thing. You couldn't do your work if you had to wait on a mine detector.

INTERVIEW WITH THE FIRST SERGEANT AND TWO SP/4'S
OF B COMPANY, 1/27th INFANTRY BATTALION

Q. I'd like to start by asking you what percentage of your total casualties are suffered from mines and boobytraps? I know you don't have any exact figures out here with you, but could you give me an estimate?

A. I think about 50%.

Q. Of this 50%, how many would be from mines, and how many from boobytraps?

A. About 98% from boobytraps and the rest from mines. In a leg infantry rifle company like ours operating out in the boondocks, most of the time our main problem is boobytraps.

Q. Could you give me a list in priority of the types of mines and boobytraps that you encounter most, which cause the most casualties?

A. The one we run into most is the Chicom grenade, or some type of grenade including ours that they set up as boobytraps. Next, I guess, it would be the BLU-3, that bomblet the Air Force drops, then command detonated U.S. ordnance like 81's and 105's. Then there's the stick mines; these are the ones with the tilt rod type thing on them, and they can be anti-tank or antipersonnel mines.

Q. Do you have any trouble with punji stakes and these kind of devices?

A. No, they're not much of a problem any more. You can spot them pretty well and then too the VC don't use them much any more.

Q. Do you run into this stuff mostly on search and destroy operations?

A. You can search in an area some days and not find a boobytrap. The next day you go out and you run into all kinds of boobytraps. Some areas they'll boobytrap and maybe for a couple of klicks, you won't run into any boobytraps. You don't spot any or nobody sets one off or anything like that.

A2. We do run into nearly all of them on search and destroy operations.

Q. Do you run into them on road clearing operations or anything like that?

A. We've never done any of those.

A2. I've never done any.

Q. Any on a pacification operation?

A. It doesn't have too much to do with pacification. Really all of them are on a search and destroy.

A2. Most of them are.

Q. Under what conditions do you run into them?

A. Any place.

A2. You can run into them sometimes near villages.

Q. But mostly where would it be?

A. You never know. He can put them any place.

A2. I saw two men get hit one morning when we were maybe 100 meters from the first house in the village. You know those big hedgerows they have around the villages, the house was inside this hedgerow, about 100 meters away. Charlie had some in the hedgerows. The Lieutenant, instead of having the point man go up and check it, set the damn boobytrap off. It got him in the leg. It didn't hurt him badly, and he was back on duty in about a month. At Tan Bi, right down you might say the main road in town, in little bushes along the roadedge Charlie had these antipersonnel mines. One guy was sitting on this side of the bush, another guy standing on the road asked for a cigarette or a light. The guy cut through the bush and set one off. We run into them sometimes close to the villages, out in the jungle. To me, sometimes it's about 50-50 actually.

Q. Where does he put them?

A2. He'll have them outside of villages. Most of the time he tells the local people where he's got them. A lot of times, if you can get hold of some of these locals, they'll tell you.

Q. Do they volunteer that information?

A2. Sometimes they'll volunteer it because they know if they tell where a boobytrap is located, an S5 usually will come out and give them a few hundred piastres.

Q. They do it to make a little money?

A. That's probably why they do it, otherwise they could care less if you tripped about 14 of them.

Q. You say you might find these things anywhere in the vicinity of villages, near base camps, or in the jungle. Now, if you found some in the jungle, would they normally be on the trail?

A. They'll put them on and some of them they'll put off the trail.

A2. Either on the trail or right off the trail.

Q. Do you very often hit them when you're pushing through the brush?

A. We run into one once in awhile.

Q. Do you move on the trails often or is it the theory that you stay off the trails?

A. Sometimes on the trails, sometimes off. It depends on what you think you might run into. If you think you might be better off by staying off the trail, you stay off the trail. If you think it'd be easier to move up the trail, you move up the trail.

Q. When they're near villages, where do you normally run across them?

A. Normally on the paths leading into the village.

Q. In the base camp area, where do you normally run into them?

A. We find them on approaches a lot and around their bunkers.

Q. Right by their fighting positions?

A. Right.

Q. How about when you're protecting a road clearing operation, where do you find them; in the road, by the road or what?

A. It all depends. They may be in the road or they may be planted on each side of the road where we are sweeping. They will plant them wherever they think the G.I. will go.

Q. This stuff that you're running into now. What type of fuze does it normally have? It is instantaneous or is it delay?

A. Mostly instantaneous, I would say, sometimes it is a quick type like a hand grenade with a four-second delay.

Q. What kind of initiating action did you find on them? Is it a pull-type, pressure-release, pressure or what type?

A. Trip wire. Most of the grenades are pull-type where a guy trips on it and pulls that pin out.

Q. Pulls the pin and that releases it?

A. Yes, he might tie a string around the grenade, and tie the string to a stake.

Q. Are you activating any of them by just stepping on them?

A. No. Not very many of them.

Q. You said earlier that you run into Chicom grenades and BLU-3's mostly, anything else, any other kind?

A. We found a couple of 450 pound bombs. They were command detonated.

Q. How about the tilt rod type? Are you running into very many of them?

A. I ran into them when I was in the 2d Battalion. We must have blown about 50 of them. They like to set them up for these mechanized outfits.

Q. Do you run into many electrically detonated mines or boobytraps?

A. Practically none.

Q. Any chemical, or special kind of fuzes?

A. No.

Q. What's the main way that you detect a mine?

A. By seeing it.

Q. How do you do that? Is there some warning signs put up?

A. You watch in front of you, and watch where you stop.

Q. What do you see that tells you a mine is there? Do you see the mine itself?

A. A mine itself, or a trip wire.

Q. Can you tell me how you normally see it?

A. Sometimes there'll be a little fresh dug pile of dirt. That's how you spot it a lot of times. Then you go around it and look for it.

Q. That's really detecting the mine itself?

A. I think it's a sign of weak camouflage. You see the dirt, then you see the mines. It's kind of a hasty job. If you're going to teach a guy how to detect mines, you've got to teach him what to look for such as clumps of grass tied together or bamboo tied together.

Q. These are the signs?

A. The signs put up to warn the people.

A2. A lot of times it's a knack that you acquire. I remember a guy that could spot a mine or boobytrap just like that. I dont know how he did it. He could smell them.

A. Some people just have a knack. They'll be out there, and all of a sudden

it just comes naturally. They'll start walking through a hedgerow, and they'll say, "Here's a boobytrap in here." They just search it out. Maybe by feeling with their hands and looking on the ground they'll find it in a clump of bushes. They'll just run across it, a little trip wire.

Q. Let me ask you a question. These fellows that seem to have this ability, kind of sixth sense we might call it, do they have any characteristics that they all have in common? Are they all real observant, do they have excellent vision; or what?

A. There were two guys in front that walked over four boobytraps and the third guy back spotted every one of them.

Q. Is there any way you could pick these kind of guys out?

A. You never know. Somehow when they get out there, they just develop it.

Q. You've got no way of knowing how they do it?

A. No, sir.

Q. Is one of the reasons for finding them because of the tactical conditions? In other words, you know this is a logical place so you take it easy and you are careful here.

A. Your most logical place is a hedgerow, an open field, a grave yard or some thing like that. Some place where it is easy to move is where the VC will put his stuff.

Q. Do you ever use dogs and are they any help to you in detecting mines and boobytraps?

A. I don't know. A dog'll alert about every 100 meters if there is something out there or not.

Q. Has a dog ever alerted on a mine or boobytrap?

A. One time they said he alerted on one. We found a boobytrap in War Zone C in February. The dog had alerted, and they got checking around and found a boobytrap. I guess the dog got credit for it.

Q. Do you use mine detectors at all?

A. When we protect a road clearing we could use a mine detector, but we never have used them.

Q. Do you have people in your company that are capable of using mine detectors?

A. We have three that just went to school yesterday, but these are the only ones. We don't have them normally.

A2. Most of the time they come from the engineers. Anytime we've had them when I was out, we always had them from the engineers. We just sent three to school yesterday. I've been over here a little over a year and that's the first time that I've ever seen anybody go to school where a line unit takes training on it.

Q. Do you have any ideas on how to detect or neutralize command detonated mines?

A. That's something you have no control over.

Q. Do you ever use recon fire or something like that, in a suspected area?

A. When I first came here every hedgerow we saw we reconned by fire.

A2. We found one of those big Chinese Claymores in the 2nd Battalion, on Cedar Falls, set up about 25 meters from the 50 caliber. We found it out there the next morning. It wasn't out there that night. They snuck it up there, and put it up there that morning or during the night. The next morning there was a big Claymore out there. They went around it, followed the wires and there was an old Mamma San sitting in a hootch. She had the wire and the battery in her hand and was supposed to touch it off but she went to sleep. She sat there holding the wire to make final contact and dozed off.

Q. Lucky for you.

A. Lucky for that machinegun crew.

Q. You don't do this recon by fire much anymore?

A. Now you don't shoot until you get shot at.

A2. Most of the time they won't let you shoot because they say the area is pacified, and that's the areas that they shoot at you from.

Q. Do you ever do any mine or boobytrap detecting at night?

A. Sometimes.

Q. What do you normally do when the man on point finds a mine or boobytrap. What's the procedure?

A. Pass the word back, and presume that they will pass it back down the line.

A2. Usually you've got a sergeant or a platoon leader pretty close behind you, and you just report the boobytrap to him.

Q. Then what happens?

A. He sends the demo man up to blow it.

Q. Who's the demo man? Is that an engineer you have with you?

A. No, just one of your own men.

Q. Do you normally have engineers with you?

A. Sometimes we do, and sometimes we don't. They have courses set up here. Sometimes you might get one, two or three men a month, and they'll go to a four hours mines and boobytraps or explosives and demolition school. They're usually trained to set off charges in cases like that.

Q. Do you ever by-pass a mine or boobytrap because you don't want to reveal your presence, because of a lack of time or something?

A. If we do, we just lay toilet paper around it so the next guy won't step on it.

Q. Then you do sometimes mark them and by-pass? Why?

A. Lack of time, or maybe no demo with us.

Q. Do you have to make any written report after you find them or anything like that?

A. Usually when they find an antitank mine or a boobytrap, they call back to the Battalion S-3 that we found a Chicom grenade with a trip wire and it was blown in place--something like that. As you find it, you report it. That's all that they'll do most of the time.

Q. How do you get the information down on the mines and boobytraps? Are you given this in the intelligence part of your operation order? Do they tell you what's in there?

A. Sometimes they do, if the area's possibly heavily boobytrapped.

Q. Do you ever get any help in finding boobytraps from the local people?

A2. Possibly. Usually when you're walking on a sweep, though, these interpreters will tell you. Sometimes they'll tell you there's boobytraps all over.

Q. In other words, you get the word from the local people quite often?

A. Right.

A2. They've been talking about using some of the local people to help on sweeps.

Q. When you say sweep you mean a sweep through the jungle not sweeping on the road?

A. Right.

A2. They're not talking about using mine detectors at all. We usually find boobytraps the hard way.

Q. Would you say most of your boobytraps are found by tripping them?

A. You can find a lot of boobytraps if it's real heavily trapped in an area, but if you're walking at a good clip and just glancing around--all of a sudden--bang!

A2. It's not always the point man that trips it either.

A. A guy in the middle of the column can spring one, too. The best way to find boobytraps is by using your head.

Q. How do you mean?

A. By staying alert. Most people just walk along in a daze.

Q. Then most of the people in the column are just walking and depending on the point man up there?

A. A lot of them are like that. They walk along like they are walking around the block back home. The next thing you know they're doing about a double back flip in the air when they stumble over one of these wires.

A2. They might be scared and looking for Charlie. They forget about those boobytraps in front of them.

Q. Do you ever have occasion to use grappling hooks?

A. Sometimes. We've used them but not too often.

A2. A lot of times we use a bangalore torpedo.

Q. You carry bangalores along?

A. When you go through a hedgerow they blow a hole in it.

A2. We've used them quite a bit. They make a nice deep path so you don't have to fight your way through that hedgerow.

Q. Did you blow them yourself?

A2. We had a demo man. I didn't blow them myself. I had a weapons platoon when I was down there. We never took the 106's to the field. Therefore, I took my whole 106 section and sent them to demo school for a four hour block--all nine of them. They all carry demo and they all have a demo kit. And a lot of the riflemen carry bangalore torpedoes. When they run across a hedgerow they figure chances are that it's boobytrapped, so they put a bangalore torpedo through it, put a fuze on it, and let her go. I think we tried it one day on a dike just to see what it would do.

We've used a bunch of them here. You can hook them together, slide a bunch of them down that dike and put a fuze on it. It tore all that bamboo out of there. Just blew it on both sides.

Q. Were you out there with them at this time?

A. This battalion was. I wasn't out there, I was back here.

A2. Did you see that ditch we dug out there with a bangalore? That's to get water into the pumps down here.

A3. That bangalore is a nice weapon. I've never seen any used in this battalion though.

A2. It makes a nice path four or five feet wide.

Q. Incidentally how do the point men operate over here? Do you have one guy watching the ground and one guy watching the trees?

A. The point man watches everything; everybody watches everything.

A2. Everybody's supposed to watch all around.

A3. That's the only way you're ever going to find things. Every man has to be on his toes down here.

A. You've got two point men--one man here and one point man here. If this man's watching the ground, he's not going to see what's over here. This man's watching in the air and when he gets up there, he's liable to stumble over a boobytrap because he's looking high. You've got to watch down, up, side, and everything.

Q. So each man has a total responsibility?

A. That's right. He should look all over because I can walk past a booby-trap or he can, or it can come right between us.

Q. When the average enlisted replacement comes over here, do you think he is prepared as far as mine and boobytrap training is concerned?

A. The best thing he can do is get with somebody that's been here awhile.

Q. Where did you all take your mine and boobytrap training?

A. Fort Polk.

A2. I didn't have any. I had three weeks of AIT. I was in the honor guard at Fort Benning. Our's was an infantry unit.

Q. About this training at Fort Polk, did it help you?

A. It helped as much as training can, but there's only one way to find out--go out and look for them. They can't set them up at Fort Polk like Charlie can.

A2. The best thing they can do is teach a replacement to stay alert and think.

Q. What do you think they could do at Fort Polk that's better than what they're doing now?

A. I don't know. They have a good school there.

Q. Do the NCO's and officers come over pretty well prepared or do they still need on-the-job training?

A. That's right.

A2. It's the only way you're going to learn.

A3. It's the best thing we've got.

A2. They know what is in the book but Charlie doesn't fight by the book.

A. In some of these Army Digests once in awhile you get a man who sits down and writes a good article, not trying to blow himself up as a hero. You read some of these articles and you think the particular individual won the damn war over there by himself. But if the guy just sits down and writes a good, common sense article using plain GI language that a private can understand without 14 years of education, if he explains what goes on, and what you really run across, I think that would help.

A2. It might be a good idea to take some of this stuff and put it in a newspaper, about half a page or a page. Do you think that would be good?

Q. You mean like training tips?

A. Not like some of it I read, no, sir!

A2. No, I mean some type of good training tips.

A. A lot of these guys down here can come up with better ideas than some Colonel sitting back behind a desk, reading through a bunch of these things.

Q. How about these "Lessons Learned" publications? Do you find these along the line that you're talking about?

A. Well, I read some of them. Everybody talks about some of the lessons learned but sometimes it turns out that you do the same thing that the guy in the lessons learned tells them not to do.

A2. They go by their training, too. It's funny sometimes.

A. I've read some of them and there's one specific instance where they said don't use the same route everyday when you move out of a night location. I've seen units go the same damn route every morning. I think another unit just about two or three months ago was pulling that same trick, going out the same route from their night location. One day Charlie just set up a bunch of Claymores on them. When they moved out of their base camp, they popped a Claymore on them and sent a battalion sweeping through their perimeter.

A2. In my opinion, I think Charlie is a better fighter than we are.

A3. Quite a bit.

Q. When these replacements come in here what do they get at the division school?

A. They go five days at the replacement center.

Q. Four hours of that I believe is on mines and boobytraps. Now do they get any follow-up training when they get to their unit other than OJT?

A. We don't have time, we don't have any training schedule. It's OJT period.

Q. Is there any special training for people later, for selected persons?

A. Right. They'll have these courses. You'll send a man to tunnel rat school. A four hour block of instruction on operating in a tunnel. You get mines and boobytraps, explosives and demolition. Then they have a combat leader's course. It's a nine-day course. We pick a good PFC or SP/4 that looks like they'll make a good leader and send them to school. Of course, sometimes we only get one or two going a month and sometimes you get three or four. And when you get short of personnel, and you got three or four going you get sorta mad because you have to take them out of the field and send them to school.

A2. Combat leader school will teach you more than any other school in Vietnam. When you come back, you do pretty good.

A. This man here went through the school for nine days.

A2. It's the best school they have here. They teach you more about Vietnam in that school than they did at the replacement center.

Q. During this nine-day school, was there any mention made of what we've been talking about, boobytraps and mines?

A2. Yes.

Q. How many hours would you say are devoted to it?

A2. I'd say at least 6 or 8 hours.

Q. In other words, about one-ninth of it?

A2. Yeah. We went back through the mines and boobytraps school while we were there and they taught us how to set up demolitions and everything.

A. Everybody that I've sent to the school, when they come back, said they thought they learned a hell-of-a-lot over there in that combat leader school.

A3. I've been in the company two months and what I learned in the school did me a lot of good but I'll be damned if I can remember what we studied. Weapons, a little bit of leadership, map reading, and mines and boobytraps.

Q. Do you have any recommendations for improvement in the mines and booby-traps training in the States?

A. Well, I don't know what they give them now back in the States on it.

Q. They get eight hours mines and boobytraps now.

A. Is that training for Vietnam? I was at Fort Gordon AIT before I came over here. Of course, I was mortar training. Some of them just want to put on a show to make it look good for somebody and they're not getting down to the real meat of the subject.

A2. It just makes it look good for the guys that are inspecting the training.

A. You're right. That's just what some of it is.

Q. I visited Gordon and some of theirs is still pretty much conventional land mine warfare where you're laying mines and so forth.

A. You don't lay them like the Germans did in WWII. We may find one anti-tank mine and three to five antipersonnel mines around here. Charlie'll stick one here and he'll stick one over there; he doesn't have any pattern. Where Charlie thinks you might go, that's where he'll put one.

A2. I think they ought to put them through an extensive boobytrap course back in the States.

A3. Yeah, but back in the States everybody figures it ain't gonna happen to them so they don't give a damn about the training.

A. That's right.

A. That's the attitude of a lot of them.

A2. If they could set up a course in mines and boobytraps that would deal strictly with the type of warfare we're running into here now. You can't forget what you might run into, later on and you can't just throw the antitank mines out in a normal mine field. If they would take a lot more interest in what is done over here and try to take the men through some similar piece of terrain like they would run into over here and show them how Charlie's going to rig them up. Like they say, he doesn't put them in a path but in one village he might boobytrap the gate and the next 20 villages that you go in, they don't put a boobytrap on the gate. You play with the gate 30 minutes trying to figure out how it is boobytrapped. It doesn't have one, he's got one maybe just inside the gate.

Q. How about training in-country? Anything you could recommend over what they're doing here now?

A. From what I've seen here it's pretty good. From what I know of the combat leader's course, I think we could ship them over here about two weeks earlier, send them to nine days over here, and they would come out better soldiers. Anyway get rid of a lot of that Mickey Mouse stuff they have in basic training and AIT. A lot of it is just a bunch of eyewash. They should get down to the meat of the subject.

A2. When you get over here, you start forgetting about the eyewash portion of the Army.

A3. It's business over here. I figure they worry too much about the training areas being well policed. I don't know why they have the guys instead of being in the class listening cleaning the damn training area because some wheel's going to come out and visit the class.

Q. Anything you can recommend on actions in the field over here such as improvements in detection, or reporting or disseminating this information?

A. Unless you can issue them better eyes, I don't know.

A2. It's almost impossible to know, really. You just have to keep your eyes open and keep your head spinning all the time.

A. You can go into areas and they'll have all the hedgerows boobytrapped. Then, again, you go through another group of hedgerows, Charlie won't have a boobytrap in it. And then you can go into or go across an open field, there will be no boobytraps. Then all of a sudden in an open field he's got them all over the damn place.

Q. Is there any marking systems you can tell me about that would help detect something being there?

A. There's loose dirt, and grass or weeds tied together. At the base of a bush, sometimes, they'll leave a boobytrap tied right onto it.

A2. We have some Chieu Hei's working with us and they know where to look. They're teaching the guys a lot right now.

Q. So using the Chieu Hei's really helps?

A. Oh yeah, very much.

Q. Well, that's about it unless you have any other ideas, thanks a lot.

INTERVIEW WITH THE S-4 OF 2/14TH INFANTRY BATTALION

Q. First, could you give me some idea of the percentage of total casualties that are suffered from mines and boobytraps?

A. Well, in varying operations where we've had a high casualty rate, I'd say roughly 80%.

Q. Eighty percent of all your casualties are from mines and boobytraps?

A. Right. And in operations for the battalion overall, I'd say about 75%.

Q. Of this total, what percentage were from antivehicular and antipersonnel mines, and what percentage were from boobytraps?

A. Almost 90% to 95% were from boobytraps, and the other 5% from antitank and antipersonnel mines.

Q. Could you give me a priority listing of what you understand to be the major casualty-producing types?

A. Most of them would be mines that are rigged by the VC: wooden box mines, hand grenades that have been boobytrapped and American ordnance that has been boobytrapped.

Q. The major thing then is the various types of ordnance that the VC has boobytrapped?

A. Yes. One occasion in the Bo Loi Woods, there were quite a few Chicom Claymores that were originally boobytrapped. This is not a high percentage, but this is an unusual situation.

Q. Other than this boobytrapped ordnance, what would be other major items that they run into?

A. The Chicom grenade and the regular U.S. grenade that has been boobytrapped with various techniques of wire, the push- or pull-type.

Q. What would be next?

A. I would say Claymore and they had quite a few stick mines in various locations down in the canal area and out in the pineapple. Then to a lesser degree, we run into the problem of butterfly mines being boobytrapped.

Q. Are the punji stakes any problem?

A. Negligible. We've received very few casualties from them. Most of those were in a fill hole which has since been cut down.

Q. In the States they spend a lot of training time on things like the mace, but I haven't talked to anyone yet that's ever seen one used over here. Do they run into that kind of stuff, the bamboo whip or this kind of things?

A. Not too much in the areas we've operated.

Q. So most of the nonexplosive-type things really haven't been too much of a problem?

A. Not in this area. I think they were probably more of a problem a year and a half ago when we first got here.

Q. Are they getting a little more sophisticated now?

A. I think so. Well, we reacted to them and as a result I think the VC changed to something a little more sophisticated.

Q. On what type of operation do most of the casualties occur?

A. Most of the time on search and destroy.

Q. About what percentage?

A. Since the majority of our operations are search and destroy, it has to be 75% to 90%, somewhere in the high percentages. Almost all of our operations are search and destroy.

Q. Do you have any of these road clearing missions?

A. We drew a detail for a road clearing mission which lasted indirectly from May until September. We had engineer support and we had our own recon platoon with tracks for security. We received very few casualties on this mission because our mine detection teams located the mines and destroyed most of them in place. With all the supply convoys, I've never lost a truck.

Q. You were running supply convoys back and forth?

A. I run them everywhere--Cu Chi, Tay Ninh--and have never lost a truck. We've been pretty lucky or something. The engineers do the mine sweep for the majority of the big operations. Our recon platoon can sweep the roads and they have the authorized mine detectors.

Q. Going back to the search and destroy operations, under what conditions were the mines and boobytraps encountered? Was it in the jungle?

A. Most of them were in the jungle or in areas like the pineapple plantations that are no longer maintained and are wild with undergrowth, or in Bo Loi Woods which has pretty good canopy, or in a canal area which has farm land with rice paddies, dikes, hedgerows and streams going around the canals and streams.

Q. In these general areas, where would you normally find them on a trail?

A. Most of the time--on a trail or in an area where the VC had something they didn't want us to get to. They would have it pretty well mined and boobytrapped on any approach to the area.

Q. How about going into an enemy base camp?

A. Yes, that would be an area. We were in the pineapple on an operation in April. We uncovered several caches and several service areas and rear areas. These were rear-echelon units and all the way in was heavily boobytrapped, almost all major approaches. Where we're operating now we have a large proportion of NVA and we don't get as many boobytraps because they don't know the area. Plus they move around the area as we do and they can't afford to boobytrap.

Q. You are running into more NVA up there?

A. Yes, in French khaki uniforms.

Q. Do you run into much stuff in the villages, generally?

A. We haven't run into too much in the villages or around the villages. On one mission we covered quite a few villages and there was quite a bit around them, but that was a VC stronghold. Also there were resupply lines around those villages, but not in the villages.

Q. The ones you found on these road clearing operations, were they right in the road or on the shoulders or what?

A. Most of the time they were on the sides of the roads in the vicinity of the ditch, but on occasion they would be in the center of the road. I remember several occasions when they were found in the general path of tire tracks that had been made in the road. But for the most part, they're on the sides of the roads.

Q. Do you run into the command-detonated type much on the sides of the road?

A. In the areas we've been over, we haven't run into too many of them. However, on Route 4 now I think they're running into a few more of those, although we don't have that mission. Most of the ones that we've found have been placed in by local VC and guerilla units.

Q. Do you know what kind of fuzes they're running into mostly, whether it's instantaneous or delay?

A. We've run into both and I think most of them are pressure-detonated and pressure-release, not too many delay. They have run into enough to make us aware of them, but they're not common.

Q. Do you run into many electrically detonated types?

A. Not too many. We've run into several that have been abandoned. On the most recent mission, we were running into 20-, 30- and 40-pound antitank mines on the trail.

Q. What type were they?

A. I don't know. They destroyed them in place without checking them, but I think they were Chinese Communist antitank mines. I'm just not sure what type they were.

Q. What do you think is the main way they detect the mines? Is it visually, or by using a mine detector, or by other means?

A. On road clearing operations, by use of the mine detector plus visual. And I'd say visual is just about as good as the mine detector. Now on this last road that we were clearing, they had the big mines placed. The company going ahead to secure the road was finding the markers for the mines along the sides of the road. Some of them were old and outdated without mines and some of them were good. But they were picking up both the markers alongside the road and the mines on the road visually and with mine detectors. So I'd say on road clearings, both.

Q. How about on a normal search and destroy operation?

A. On search and destroy operations it's purely visual. We very seldom carry mine detectors. We carry grappling hooks and three- to five-foot long sticks for probing off to the side. This sometimes helps.

Q. On this visual detection, what helps the most in finding them? Is it signs of the triggering device or any alert from the local people?

A. Well, a lot of the areas that we've been in have been heavily boobytrapped and there haven't been too many civilians around. In relatively safe VC sanctuaries in the past, sometimes you'd get a hint that an area is boobytrapped from the civilians through the S-5 channels and the interpreter. But actually locating them is visual and that's the training that the company commander gives his company. I think the men pick it up. A guy that sees his buddy blown up in front of him learns a heck of a lot quicker to detect this stuff.

Q. They put more into it?

A. We had a sergeant who could trip a boobytrap and hit the ground before it could go off. We've had several other people who learned that when they trip them they normally have time to hit the ground.

Q. Do you hear them talking much about seeing these signs put up to warn the local people or anything like that?

A. They talk about it quite a bit. Sometimes they see them and sometimes they don't. In some areas where we've been, there are quite a few of these markers. I can't say how accurate they are though.

Q. Does knowing about the tactical conditions help them to know where it's dangerous and where to look more closely?

A. I think so. One of the best things, whether in a unit or a battalion, is an experienced staff and commander because they know the areas which are highly boobytrapped. Then when you go into the area, you know to look for them. If you go into an area not sure of what to look for, that's where you catch your larger number of casualties. Sometimes the intelligence briefings indicate if they're there, and sometimes they don't. If you know to look for it, it's a lot easier to detect them.

Q. Do they use dogs in your battalion?

A. We have used them. I can't say with what success or anything. Whenever possible they try to have a scout dog with them, but I can't give you any statistics.

Q. Do they have any techniques for detecting or neutralizing these command-detonated mines?

A. We use grappling hooks and on occasion we've used bangelore torpedoes. And various engineer lieutenants attached to us have tried other techniques.

Q. Do you ever hear of them trying to recon by fire?

A. We recon by our fire and artillery, primarily M79. I think the success on this is sometimes marginal.

Q. Whether they blow them?

A. Whether they blow them or make them more sensitive. I've found and destroyed quite a few that have been in Charlie's caches. I think that's where you are the most successful sometimes.

Q. Do they do any night detection for mines?

A. No. About all we ever do at night would be to have our radar out. We have run our radar and searchlight battery on roads that we've secured. We had one road on one base camp where there were one or two mines in it every morning. Then we brought in a searchlight and put it on radar, on infrared, and we covered the road with that very successfully. If anything crossed it, like an animal, we picked up a squad on it and the next morning we knew where it was. That's a good technique for a road that's straight. It has pretty good coverage.

Q. That's by using this infrared?

A. Infrared light on your searchlight from the searchlight battery. That's just a special technique for certain circumstances. We did this real well when we had a straight road for a little over a kilometer.

Q. When they found mines, did they use the regular procedure of passing the word back, marking them?

A. Most of the mines we found were blown in place. We had an experience when we moved in where one of our sister battalions had moved out after they found some mines and hadn't marked them. As a result, we had to make a battalion search and had several mine injuries. So our policy has always been, and we emphasize it, that when we find a mine we blow it in place.

Q. Do you have engineer people with you much?

A. Most of the time, but we only have a platoon of engineers for the battalion.

Q. Do you use them for blowing mines and boobytraps?

A. I'd say that their primary mission is blowing bunkers and tunnel complexes and giving technical assistance. Most of the companies can blow these things themselves. They just use a combination of both. Whenever there's a problem or a question, the engineers are always brought in.

Q. Did you ever hear of their by-passing them because they wanted to be quiet or they didn't want to take the time?

A. They might on a night ambush patrol, but they would mark it. I can remember passing several punji pits when I first got here, but most of the time, even if it's a minor boobytrap, it's worth the time to slow down and blow it.

Q. Do they have a follow-up reporting system on the mines, like a written report?

A. Normally you log it in your tactical log and report it to brigade. If it's a road security mission, they're kept by weights and types the best way they can, and the crater size. Then it's all reported through channels, both engineer and tactical channels.

Q. Do they use any kind of form to report all this stuff?

A. No, no particular form; just as long as they have the estimated weight, the type--whether it's a plastic or wooden box or ammo can, or whatever type of mine it is--the size crater, and if at all possible, the type of fuze used.

Q. Do they include this in the after-action report?

A. In the major after-action report. And every day in our staff debefing, the S2 brings up all the major incidents to include the number of mines found, where they were found, and whether it was a road clearing mission.

Q. How about the dissemination of this information, like in the orders before an operation, does the S2 usually give all the information on the mines?

A. Pretty much. When we're going to an area, if there have been any instances at all, he brings them up, and then he gives his own opinion as to whether to consider it strongly. He considers whether there have been only one or two instances or, if it's heavy, the type mines or boobytraps or whatever type incidents. So your company commander knows what to expect.

Q. Do you get anything in the form of verbal or written information from higher headquarters?

A. I've seen several publications come through. Most of them recently. There have been two down in the past four or five months on mines and boobytraps the VC use and about this technique for marking and the type of damage that they do. They distribute them down through company level and it's up to the company commander and the lieutenants to disseminate it to the troops.

Q. Have you heard any comments on the adequacy of mine and boobytrap training for the enlisted replacements?

A. I haven't heard any specific comment. There have been some general comments. Nothing pointed enough to tell.

Q. What about the NCO's or the officers in this area?

A. I think the NCO's, the senior NCO's for the most part, get better information out of the replacement training than the others do. But once they've been out on an operation where they witness it, and have some experience in locating or finding them, whether it results in a casualty or not, I think they really pick it up. I think on-the-job training is the most important phase of it here.

Q. Along with the replacement training, they have the four hours on mines and boobytraps at division. Do you do any more training in the unit?

A. The battalion stood down for five days in August when we had training. We covered all phases of training and they covered mines and boobytraps again. And the S2 covered intelligence and everything which is again related to their techniques of informing the men. They were hoping that every six months they could stand down for five days just for refresher training. On this type of training, I think the platoon and squad leaders have to know it, and I think the best training they can give to the man when he gets to the squad is to show him. It seems to me that if they ever find a mine or boobytrap and they have a new guy that has never seen one, they should show it to him before they blow it. Then he'll know what to look for and see how it's blown.

Q. This advanced training or additional training, is there any of that given?

A. We have commitments for division courses. Everybody gets the replacement training, of course. Then if a man shows he's a potential leader he goes to the Combat Leader's Course. There are other courses in mine detecting, etc., which we attend periodically. I couldn't even give you an opinion on the effectiveness of the training.

Q. Any refresher training of any kind?

A. Not as far as I know, other than that estimated semiannual stand-down for 24 hours or so where the company commander is supposed to give refresher training. He covers whatever they have the most trouble with. It would be company level and unless the company had a rise in mine and boobytrap casualties, he probably wouldn't cover it. It would depend on the missions he had recently. Considering our particular situation now, he probably wouldn't cover them because we haven't had any trouble with mines and boobytraps in War Zone C.

Q. Then you're not running into them much there?

A. Very few. We've had incidents, one or two, but they're not doing much of this. There's too much NVA and VC movement in the area and he's cutting his own throat if he does it. He can't get resupplied. We've had isolated mine and boobytrap incidents but it's not of enough frequency to say he's doing much now.

Q. What recommendations do you have to improve mine and boobytrap training in the United States?

A. I think basically the use of experienced NCO's and cadre. When I was in a basic training center there were only two NCO's in the battalion at that time who had been in Vietnam. None of the officers had been. And no matter what you read or what you say, I don't think there's anything that takes the place of having been on the ground. I think that with the rotation we have, we should have more NCO's in the training centers now who have been over here. And I think that will have a significant effect on them.

Q. How about in-country training, anything else other than what they are doing?

A. I think the key might be to increase this every sixth month training stand down to quarterly so the battalion could stand down and have it for four or five days. I think the replacement training and the other is adequate. What they need is unit training and maybe some more emphasis placed on training the squad leaders and the team leaders. In the final analysis, it comes down to platoon tactics, platoon control and company control. And that's where the training centers come in.

Q. Is there anything you can recommend for actions in the field to improve detection of mines and boobytraps?

A. After this experience we've had recently with these Kit Carsons, I think that's the key to the whole thing. Getting something like this going. The use of Chieu Hois, Kit Carson Scout teams I think is what they call them. The company has picked up so much information and it's being spread throughout the whole battalion as a result. To me, it's one of the most valuable things we've done.

Q. It sure sounds valuable to me, too. These Chieu Hois being ex-VCs get the inside scoop.

A. Well, the other day this company commander was talking to this Chieu Hoi while he was in a fire fight and he found out what unit it was, some of the officers' names and everything else. There's some question about it, but it seems to me to be invaluable training, and since the company commander himself speaks Vietnamese this makes a big difference. In other words, you're going down a little trail, and the Chieu Hoi stops and points out something and explains that where this little twig has been broken off is pointing in the direction that the VC have gone.

Q. You mean these little markers in the trail?

A. Most of the time the VC don't know where they're going. Somebody goes along, breaks a stick and puts it in line behind them and they come along and go from stick to stick to know which way to go. So one of the best ways to get Charlie lost all over the area is to turn them around 180 degrees. He doesn't know where he's going. I think the same thing is true on mines and booby-traps. These Chieu Hois have done it and they can pick up those signs.

Q. How about destruction, reporting and disseminating information?

A. I think our reporting procedure is pretty good. We get our reports in from the companies and we make our reports to the brigade. The engineers report back through the engineer channels and they cross reference I think.

Q. Do you know about any of these marking systems that they're talking about?

A. I've seen them. I've seen the pamphlet where they show the markings. It's available to anybody who wants to find it. There was a whole list of them put out by the MACV J2 about three months ago that had all the marking symbols, what they mean, and the type of mine that it indicates. All the company commander has to do is get this out, read it, and study it.

Q. I was just wondering, do they do it?

A. They really don't have enough time. It's just something that's available in a little pamphlet. I knew about the pamphlet and I asked a couple of people and they said that they had the pamphlet in the company but it never got past the company commander's desk. There aren't enough for all the men to look at and the way we've been operating the past sixty days, with a search and destroy or a sweep every day, he just doesn't have time. When you get in at 1700, you have a staff meeting, eat supper, put out your order to your platoon leaders, and get your bunker lines posted.

Q. Do you have a certain section you're responsible for at night?

A. Every night. Every morning the companies go out except for one that stays back on outpost duty and that doesn't leave too much time. The company commander then checks these outposts two or three times a day, does his other planning and everything else, so his day is pretty well tied up. That's why I think this refresher training on a quarterly basis would be good. Stand the guys down and let them have five days of training. I think that's the key to the whole thing. In other words, they talk about the ARVN training as well as fighting and, in the same sense, everybody trains as he fights. But we need a little more time just for training. I think that would be a good investment of time.

INTERVIEW[1] WITH 2ND BRIGADE COMMANDER

This very busy commander took the time to ask about the productiveness of our visit, give us his views on certain aspects of the mine and booby-trap problem and asked for our comments on his special mine sweepers training course. He said the eight-hour mine sweeper school had been set up for selected men from the brigade's tactical units to insure that they possessed the capability of supplementing the engineers' mine detection efforts, when needed, or accomplishing their own sweeping when necessary. We were able to report that the instruction had been excellent, and in the practical work periods, the men had adequate time for hands-on-equipment training with the mine detectors.

In discussing mines and boobytraps used in the 2nd Brigade areas, he pointed out that while many mines activated by a tilt rod had been encountered lately, particularly in the brush clearing operations, the pressure-type antitank mine was the primary type used by the VC. This was the type using separated strips of wood with minimum metal contact points on the inside which touched when sufficient weight was put on the top strip to push it down. He also felt that the dual purpose use of mines by the VC should be recognized. For example, a tilt rod-type mine can be activated by a man walking through the brush, by an APA or by a Rome plow. Therefore, it is both an antipersonnel and an antitank mine. This point should be made in CONUS training, he felt.

He described the manner in which his brigade accomplished road clearing operations to permit resupply convoys to operate in a particularly dangerous area. Another unit had operated in this area previously and had suffered fairly heavy losses even though they had swept the roads prior to running their convoys. To avoid these losses, he had first clamped very tight security measures on his convoy movements and moved them at varying times from different directions. He also started his mine sweeping teams from several locations moving toward each other to reduce the sweeping time required. He then moved small security elements in behind the sweepers by helicopter. These security elements were given overlapping sectors so they could keep the road under visual observation to prevent the VC from coming in behind the sweepers to plant or hook up a mine. It was understood that the VC had done this previously on the swept but unsecured road. Using these procedures, the brigade had been able to almost eliminate losses from mines in this area.

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[1] Not tape recorded but reconstructed from notes.