SUBJECT: Information on Japanese Defensive Installations and Tactics.

Number 1569-45

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REPORT DISTRIBUTED:

[Redacted]

E. S. JOHNSTON
Colonel, Infantry
The purpose of this study was to provide prompt information of Japanese combat methods in Okinawa. Particular attention was given to new or accentuated land warfare trends. It was intended for troops which engaged in similar type of combat. The continued development and improvement of cave warfare was the most outstanding feature of the Japanese’s tactics on Okinawa.
SUBJECT: Information on Japanese Defensive Installations and Tactics.

The attached documents, recently received from Headquarters, United States Army Forces, Middle Pacific, contain information pertinent to Japanese defensive tactics and installations on Okinawa.

Incl. 1 - Jap Combat Methods on Okinawa.
Incl. 2 - Jap Artillery Methods on Okinawa.
Incl. 3 - Jap Target Designation Map.
Incl. 4 - Jap Infiltration Tactics.
Incl. 5 - Outline of Organization of Positions.
Incl. 6 - Utilization of Tombs as Strongpoints.
Incl. 7 - 32d Army Combat Directives.
Incl. 8 - Items for the Attention of Unit Commanders.
Incl. 9 - Guide to Battle Tactics using Cave-Type Strong Points.
Incl. 10 - 32d Army Combat Directive No. 16.
Incl. 11 - Observations on Antitank Tactics in Defense against American and British Tanks.
Incl. 12 - Observations Based upon Inspection of Positions of Various Units.
Incl. 13 - Advantages and Disadvantages of Cave Positions.
The purpose of this study is to provide promptly information of Japanese combat methods in Okinawa. Particular attention will be given to new or accentuated land warfare trends. It is intended for troops which may engage in similar type of combat prior to having available a more carefully prepared study.

The continued development and improvement of cave warfare is the most outstanding feature of the enemy's tactics on Okinawa. Other noteworthy features include his use of considerable amounts of artillery, and its improved employment, his futility in counterattack, his strong efforts to infiltrate, and the infrequency of "Banzai" charges. He continues to be obsessed with the value of doing the unexpected. Indications at present writing show a possibility of lowering of morale, shortage of some types of ammunition, and his intention of large-scale use of natives armed with bamboo spears. The enemy here was found to have greatly expanded at least one of his divisions by attachment of two additional infantry battalions and by expanding all of the battalions of that division. He added mortar battalions and machine gun companies to his garrison in preparing for this battle. He has used an estimated 20,000 drafted native laborers. The enemy has become more security conscious; he leaves fewer documents during retrograde movement, and fewer papers are found on his dead. However, captured enemy, including the officers, still talk freely.

The enemy high command is fully cognizant of the weakness of cave warfare. He adopts it as an answer to our otherwise overwhelming firepower, and to gain delay. He strives to improve its effectiveness and overcome its disadvantages.

Probably the enemy's greatest advance in cave warfare as disclosed in Okinawa is his covering of the vicinity of the cave mouths by fire. For this purpose he uses every means at his disposal. His primary and most successful means are the siting of caves in such manner as to make them mutually supporting, the vicinity of a cave mouth being covered by other caves to the flanks and rear. He also provides open emplacements for weapons to cover cave mouths, primarily for use when supporting cave-emplaced weapons are neutralized. In many cases these covering weapons, such as machine guns, are at such distance and so well concealed as to be very difficult to find for neutralization, whether in caves or open emplacements. His many mortars are well used from defiladed positions for this purpose. His artillery participates in such support, in many cases being used very effectively, in spite of longer ranges than the Japanese are accustomed to using. Finally, he most tenaciously engages in hand to hand combat, or in grenade duels, for areas in front of the cave mouths. When there is no chance of withdrawal, he fights to the last man.

Use of reverse slopes in the siting of caves and all other fortifications is most pronounced. This adds to the difficulty of neutralizing the cave mouths by fire, and obtaining fire support for infantry attacking caves. As most of the caves on these reverse slopes face to the flanks and rear, attacks on fortified positions from these directions are difficult. Attacks from the front are met by nearly annihilating fire placed on the hilltops by machine guns and mortars. A sufficient number of the fortifications on the reverse slopes face forward to make progress down the slope difficult. Although
progress up the forward slope is not abnormally difficult, staying on the summit is suicidal, and progress down the reverse slope is slow.

The embrasures from which weapons fire from cave mouths, which the enemy uses also for entrance and exit, are small. This makes discovery and neutralization difficult. It also, of course, limits the field of fire of enemy weapons. The enemy strives to remedy the matter by "sleeve type" (Jap expression) defenses, in which riflemen fire across the muzzle of the light machine gun or other weapon providing the primary defense of the cave. Lack of steel or concrete lining to the caves renders them more vulnerable to hits of heavy caliber shells near the cave mouth, particularly if concrete-piercing shell is used.

Communication difficulties incident to cave warfare have not been solved by the enemy. Locally, use of many interconnecting tunnels assists him, but over any considerable extent of terrain these are not complete. Many caves have no connecting tunnel. In the early phases of the operation the 62d Division commander urged the use of "determined foot messengers". He doubtless lost many of them, as he later urged increased use of radio, visual, dog, and pigeon communication. The enemy communication difficulties account, in part, for his difficulty in executing maneuver of any sort, be it withdrawal or counterattack.

Enemy high commanders caution their troops not to be isolated in caves and hence exterminated. At the proper time at least one-third are to leave the cave and assist in covering the cave mouth from open emplacements. The enemy troops are having little success, however, in complying with these instructions.

The primary weapon in a cave is usually an infantry weapon, ranging from a light machine gun to a 75mm gun. 47mm antitank guns have been effective against our tanks by holding fire until the range is short.

During wet weather advance against cave areas is particularly difficult. One of the primary means of reducing a located cave is by use of a team consisting of a small infantry group and a tank or tank destroyer. The armor lays its direct fire weapon on the cave mouth, as the infantry team works close. Should the enemy fire from the cave, he receives instant fire from the armor. If he does not, and the team is not stopped by fire from elsewhere, the infantry works close up and cleans out the cave with flame throwers and grenades, or blasts it shut with demolition charges. Without the armor, it is most difficult to reduce most caves.

The isolation of caves or cave systems from enemy supply points is remedied in part by provision of considerable stockage of ammunition and rations in the caves. This, in turn, results in material losses to the enemy when the caves are captured or sealed up. However, many of the important cave systems have so many exits that he may be able to rescue some of his cave supplies.

Another problem of the enemy in conduct of cave warfare is that of health and morale. He solves this as best he can by coming out of the cave at night for air and exercise, and by spiritual training. A part of his instructions read "Morale must be kept at a high level to avoid fear of severe enemy bombardment..." Spiritual training within the cave must be intensified..."
encouraging news about the outcome of the war...the enemy must not be permitted
to profit from fear within the caves..."

As previously stated, there have been no instances of large-scale suicid-
dal "banzai" attacks in the operation to date, but well-planned and well-coor-
dinated counterattacks, supported by artillery fire and tanks, have occurred.
During 4 May the enemy launched a combined ground, air, and amphibious counter-
attack against the XXIV Corps' 7th and 77th Infantry Divisions. A captured
document revealed the Japanese 24th Division launched this counterattack with
regiments abreast—the 89th on the right, the 22d in the center, and the 32d
on the left and the main effort in the center. The objective was the critical
terrain running from Futema to the east coast. Between 12,000 and 14,000
rounds of artillery supported the counterattack. An estimated 240-260 enemy
planes participated, and shore to shore counter-landings were made on the
west coast (estimated strength, about one battalion) while attempted counter-
landings were made on the east coast. The enemy's losses were extremely heavy
(more than 3100 counted dead), the counterattack was repulsed, and 106 enemy
planes were destroyed. This was the largest counterattack yet undertaken by
the enemy and in all other such instances strength ranged from a platoon up
to a battalion.

Jap artillery, which has so far been most active at night, has been used
in larger quantities and in larger and more varied calibers than have previous-
ly been encountered in the Pacific Ocean areas. A more efficient and intel-
ligent employment of this arm has also been indicated. Although there have
been no positive indications of the employment of "fire direction centers" or
"massed fires", nevertheless, as many as 14,000 rounds have fallen in the zone
of the XXIV Corps during a single 24-hour period. For the most part, this
artillery has been concentrated on our front line and forward positions, with
a lesser amount allotted to counter-battery, interdiction and harassing fires.
Captured artillery positions, plus reports from the troops, do indicate that
units up to the size of a battery have massed their fire. Japanese artillery
personnel appear to have been well trained. When Blue troops moved into cer-
tain areas, they received accurate artillery fire immediately. The enemy, how-
ever, has not shown facility in handling long-range firing on targets of oppor-
tunity. Although definite conclusions have not yet been reached, a study of
information available to date indicates that the enemy might possibly be using
his "light" artillery units to perform close support missions for the infantry
(in addition to infantry gun company weapons) by having each piece firing in-
dividual missions. The fact that most artillery positions discovered to date
have been located in caves, and, in general, rather widely separated, tends to
discount the probability of the employment of such light units in battery.
Normal employment of these guns consisted of rolling them out of their caves
during the night, firing 15-50 rounds, then withdrawing back into the caves.
These caves were extremely well camouflaged and, in a few isolated places, were
protected by sliding steel doors against which flame throwers were relatively
ineffective. On Motobu Peninsula a captured battery position, consisting of
2-15cm guns, threw some light on the enemy's use of heavy artillery. This gun,
incidentally, has not been previously encountered. Excellent observation posts,
adequate wire communications, and camouflage were present. In addition, artil-
lery "Data Sheets" were discovered which indicated that the guns were to be
employed as a battery. This evidence, together with the identification of an
artillery intelligence regiment (documentary evidence), would indicate that the
enemy is at least using his heavy and medium artillery units in an orthodox manner under control of an artillery commander. Additional information furnished by a captured operations map which depicted overlapping fields of fire with the bulk of the enemy's medium and heavy artillery units grouped centrally in his defensive zone. Groupings were such as to permit reinforcing fires against attacks from all probable avenues of approach.

Only one instance has been reported to date where the enemy pulled his artillery out into the open during daylight. This instance was in support of a counterattack in the zone of the XXIV Corps on 4 May 1945. While this artillery was in the open, our air observers reported that these artillery areas were heavily defended by AA. The enemy has, moreover, effectively employed 75mm AA DP guns, using time fuzes, against our ground troops.
JAP ARTILLERY METHODS ON OKINAWA

Concerning enemy artillery fire control, one report stated artillery shells fell on our front lines which were first marked with knee mortar smoke. This suggests the enemy has a method of front line fire control based on forward observation. With the exception of the KADENA shellings, no evidence has been submitted to date that the enemy is employing unobserved artillery fires. The KADENA Airfield shellings have thus far fallen into a relatively confined area suggesting that these fires had been planned prior to our landings. There is some evidence to indicate that the enemy has other prepared artillery concentration areas throughout his defensive position area and that these are fired on call of observers using radio in clear text when our troops advance into the area.

A PW captured in the period by the 7th Division gave valuable information about the organization of an artillery position containing seven 150mm Howitzers. According to PW, the pieces were hidden in tunnels under natural camouflage renewed daily and were run out of the tunnels on rails when they were to be fired. In addition, 3 light guns, designated by PW as "maching cannon", and two 75mm AA guns were emplaced to protect the artillery position. According to PW, these seven artillery and other supporting weapons were under the control of the 24th Division and were moved into position on the night of 23 April from MAKABE (7558). This presents some proof that the enemy had not, before this date, committed all of his artillery weapons to battle. In that event the enemy artillery opposing our troops until the 23d consisted of the heterogeneous infantry controlled artillery weapons of the II Battalions of the 62d Division together with mortar units and, most important of all, the 150mm Howitzers of medium artillery regiments.
XXIV Corps Artillery S-2 reports that it has been established during this period that the enemy artillery organizations are using a map scale 1/25,000 containing a 1000-meter grid for point designation of targets. This map, according to PW who gave the information, also is used at infantry battalion headquarters where requests for artillery fires are originated. Examination of a captured copy of this map revealed that the Japanese grid squares covered almost the identical areas as the grid squares of the AMS map now being used by our forces. This unusual similarity, plus the fact that the map was not used, according to the PW, before the Okinawa operation began, suggests that the Japanese grid may have been made up from a captured United States map. The grid lines of the captured Japanese map were not numbered. Instead, a target square system is used. Squares covering 3000 meters on each side were given alphabetical designations which are printed on the map. The 1000-meter squares contained within the 3000-meter squares are numbered 1 to 9 inclusive. However, these numbers are not printed on the map. Each 1000-meter square is squared off into 9 smaller squares in order to designate the area in which a point lies. The coordinates of an area in which a point lies on the map would thus be, for example; B9.63, meaning the third square in the sixth square of square 9 of block B. According to PW, a transparent template was used to plot or read the location of a point within a 1000-meter square.
JAP INfiltration Tactics

The Japanese ground forces continue in their belief in the superiority of the "Bushido" or spiritual strength over the American firepower and material strength. This is indicated by their continued use of infiltration tactics which, from what we can determine, have met with little or no success. For some reason the lessons learned from disastrous past experience either are not being disseminated or the years of indoctrination in these tactics cannot be overcome.

The tactics followed by these infiltration patrols conform to a fairly well defined pattern, although the methods employed may vary considerably. Primarily the adoption of infiltration tactics was initiated by a lack of means to combat our overwhelming strength in artillery and armored vehicles by use of comparable weapons and as a means to disrupt units by killing the higher ranking officers and other CP personnel. Thus it is that their missions normally fall into one of the following categories:

1. To destroy tanks
2. To destroy planes
3. To destroy artillery
4. To attack CPs
5. To "harass the enemy"
6. Reconnaissance for information

If the mission is one of destruction, the men are armed only with satchel charges or demolition kits. If their mission is reconnaissance, they carry rifles, grenades and some signal equipment. When their mission is to "harass the enemy", they carry, in addition to the above, knee mortars and LMGs. Occasionally the leader may be equipped with a radio, but more often they have no communication facilities.

Usually, infiltration parties operate in small groups of from 3 to 5, although as many as 150 may be sent out on the same mission. Also, they sometimes send out two or three groups simultaneously, each being assigned a different mission. Many of these missions, excluding reconnaissance, are suicidal in nature and instructions are to harass and inflict maximum casualties on the enemy when the mission is completed.

In preparation for these missions, the men are often fed Mark "MI" medicine tablets which allegedly increase their night vision. "After a day's use, night vision is increased 2.1 times. Directions for use: 3 pills after each meal (9/day) starting one day before the infiltration is to take place."

The translation of a captured document gives this information:

5. Complete preparations for raiding attacks with the utmost celerity.
   a. Always organize combat teams of 2 to 5 men a team. Always (even) in position warfare) fight in teams.
   b. In infiltration (KIRIKOMI) attacks make use of special individual skills and decide upon a division of duties accordingly.
c. Deceive the enemy but do not be deceived by him.

d. It is necessary to disguise oneself like a native both in dress and in speech.

Borrow and set aside native clothing beforehand (preparations being made by the 1st company are approved).

One plan is to assign a young soldier fluent in the native tongue to each team.

e. When out on raids, infiltrations and patrols should you become separated from your team or squad, do not give up hope and recklessly commit suicide. Be patient and take care of yourself even though it be for one or two months. Then break through the enemy lines and return. Food is to be had everywhere. Do not fail to carry out surprise attacks on the enemy on your way back.

f. You absolutely must not be taken prisoner. Even if you should unavoidably be taken prisoner do not recklessly kill yourself. Abide your time, watch for an opportunity, and then inflict casualties upon the enemy even if you have to bite him. Try to escape and attack enemy headquarters and high ranking officers. Disclose nothing whatever about friendly forces; deceive the enemy.

g. Capture enemy equipment, ammunition and rations and use them to your advantage. Take natives along with you as guides on raids.
The following translation is the enemy’s explanation of his "Octopus-pot" defensive positions. Blue troops usually refer to them as "pimples" because of the relatively small hills on which they have been found. A platoon and a flame thrower tank, covered by artillery, mortar, machine gun, and tank fire, are usually allotted to mopping up one of these positions. Thus they are eliminated one by one.

"OUTLINE OF ORGANIZATION OF POSITIONS"

1. Objective:
   To make each fire point independent and to make a strong point with several of them.

2. Organization of fire points and disposition of fire power:
   Organization: 1 LMG, 2 snipers, 4 close quarter attackers.
   Sketch of Disposition of fire points:

   [Diagram of a squad defensive position with labels for direction of expected attack, close quarters attack group, sniper, reserve sniper position, and communication tunnel to other positions.]
3. Organization of posts and of fire nets to form platoon strong point.
TRANSLATION

UTILIZATION OF TOMBS AS STRONGPOINTS

Comment to accompany sketch:

1. Take advantage of the American army's respect for tombs and its avoidance thereof.

2. The entrance will be the stone door in front which will be made into an (open and shut) swinging type/door(A), or as in the case of B, the open and shut type of entrance will be installed on the flanks.

   A--------Remodel into open and shut type
   A Entrance
   B This place will be the open and shut type entrance

Comment (not from document): In the example shown in the enclosed sketch the raiding party apparently planned to approach tomb D near the flank of the target selected for attack. A diversionary attack upon the purple (American) light machine gun position was to be made, permitting the main strength of the raiding party to gain access to the system of underground passages.

Upon emerging at tomb A, the raiding party would launch simultaneous attacks upon Brigade Hq., against the rear of a mortar position and upon the artillery gun emplacement.

Exit from the underground net could be effected from any one of the tombs but it would not be necessary to emerge from underground until the most favorable position for launching the attack had been reached.

1 Incl.
Sketch
EXAMPLE OF INFILTRATION STRONG POINTS
BY UTILIZING TUNNELS

probable line of enemy bridgehead

night raid will be carried out by the main strength or a small unit

SKETCH #1

UNCLASSIFIED
UNCLASSIFIED

Translation.

Military - Top Secret (SUNJI KIMITSU) 15 February.

32D ARMY COMBAT DIRECTIVE No. 1

Slogans:

1 plane - 1 battleship
1 boat - 1 ship
1 man - 1 tank or ten enemy dead

COMBAT DIRECTIVE No. 2:

To preserve our strength during the enemy's pre-landing bombardment:

1. Stress the protective power of fortifications; realize the value of dispersal, cover, camouflage, and deception.

2. Utilize the best time for deploying troops in positions.

COMBAT DIRECTIVE No. 3:

Plan on seizing the initiative as soon as the enemy lands; annihilate him with a single decisive blow.

To do this:

1. Avoid premature opening of fire.

2. Remember that the effective range of fire power is 1/16th its maximum range.

3. Immobilize the enemy by luring him into the heart of your defenses.

COMBAT DIRECTIVE No. 4:

Prepare ground obstacles, especially road blocks, to impair tank movement in areas where terrain favors a break through.

To accomplish this:

1. Roads within the coastal zone which are rarely used will be destroyed.

2. Mines and obstacle materials will be readied beforehand for roads in the coastal zone which are used constantly, so that they can be quickly destroyed.

COMBAT DIRECTIVE No. 5:

No matter what the situation may be, the army should refrain from panic.

Incl. No. 7 - 1 -
1. Panic often occurs because commanders of all ranks do remain calm. Under fierce bombardment, commanders must command the battle bravely with immoveable confidence and faith in inevitable victory.

2. Panic can easily occur because of consternation at the unexpected impact of the enemy attack.

   Units must stress, both in the concrete and the abstract, "relying upon waiting".

3. Spiritual training must be emphasized.

Note: Although naturally panic rarely occurs in the National /Japanese/ Army, when compared with other armies, the following instances have occurred and must be examined:

a. When, in early 1944, false reports of an enemy landing at Davao were circulated, the Navy destroyed great quantities of ordnance and material, and the residents of the city retired to the hills.

b. When the enemy landed at Marubi (TN: WALB?), the rear echelon at the port became panic-stricken and retreated.

c. At Saipan, part of the garrison forces became confused and frightened at the enemy's intense naval and air bombardment; the army organization fell to pieces as a result.

Military - Very Secret (COKUWI)

32D ARMY COMBAT DIRECTIVE No. 7
(For Co Comdrs and above)

The main positions on Okinawa are constructed in a ring of steel-type defense, utilizing the terrain and restraining the free movement of tanks in zones where this might be possible. These defensive tactics are based on a feeling of mutual confidence of all units. Once part of the ring is broken, defensive ability quickly collapses. It is strongly felt that one must base the tactics of the whole front and of all forces upon the promise that the breach and loss of one front and one unit might lead to the collapse of the whole position when one part of the ring of steel is broken.

It is a special characteristic of these main positions that each unit is apprehensive of the defensive strength of its adjacent units. It is a natural tendency for individual units to try to strengthen their own independence. Furthermore, though this is a proper endeavor, there is some danger lest they lose their heads. Each unit will hasten to plan for its own endurance and independent strength and thereby forget its common responsibilities in forging the steel ring solidly. A unit may divert too much of its strength to the rear, or leave gaps in the area along the tactical boundaries and the combat zone as shown in the following sketches, or lessen its strength at the front, thus weakening the position of the whole army.
Sketch No. 1. Example of situation in which, as a result of apprehension over the combat ability of adjoining units, gaps between the units are large and in which strength which should be used to destroy the enemy is deployed too much in the rear.

Sketch No. 2. Example of situation in which, as a result of apprehension over the combat ability of adjoining units, strength on the flanks is excessive and the front weakened.
From ancient times boundaries between units have been weak points to be warned against lest they be utilized by the attacker, and there is no denying the necessity for strengthening the will and cementing cooperation. Laying aside the present situation let us first examine the principles in Field Service Regulations, operations.

No matter how successful a part may be in holding out unaided, when the whole organization collapses it will share the common fate.

A perfunctory attitude may be sufficient for a time, but once the enemy is encountered in strength, the line will collapse. The organization of positions by the various army units is generally correct yet the details must be examined to avoid the aforesaid troubles. When we look at our own positions with an open mind, the relationship between the general and the specific, the whole and the part, becomes all the more clear. We must manifest a spirit of mutual confidence in disposing our forces.

Military - Very Secret (GUNJI GOKUHI)

32D ARMY COMBAT DIRECTIVE No. 12
(For general circulation)

Raids and Surprise Attacks

1. In setting up combat training, understand thoroughly the tactics and objectives of attack which the enemy actually uses and devise countermeasures beforehand.

The tactics and objectives of attack which the enemy has displayed in combat (and suggested counter measures) are as follows:

1. The enemy sets up a security net with natives; when this front line is penetrated, the security is relaxed.

2. The enemy's uniforms are the same color as ours; khaki for the army, dark blue for the navy. (Note the colors especially.)

3. The enemy uses dummy tanks and guns (it is necessary to watch for concealed positions, and attack after making sure of them).

4. As soon as he discovers evidence of mortars, he surrounds them with natives and regular troops, sets up a concentrated fire net with machine guns, etc., and opens heavy fire.

5. Enemy motorized units construct motor parks at night, keep their vehicles readily mobile, establish a ring of natives around the area for security, and open heavy MG fire /if anyone approaches/, using illumination.

6. The enemy conceals sentries around his CPs and artillery at night (often using natives). They keep in contact by telephone, and open fire at once. (Infiltrate only after cutting the telephone wires, quietly.)
II. It is necessary to attempt new and original tactics and plans during combat training and to prepare appropriate methods for meeting any eventuality. The use of the "jack-in-the-box" within anticipated enemy bridgeheads and positions is especially effective.

The following tactics have been proved effective during combat:

1. The infiltration unit must be divided into the supporting groups (feints, demonstrations, diversions), and the demolition and assault groups. Close liaison must be maintained between them.

2. Another effective device is to conceal shells at points into which the enemy may penetrate and to hide soldiers nearby to detonate them when the enemy passes by. This method may be used to close the gaps between strong points.

3. AT bombs are extremely effective for use by infiltration units in injuring personnel, destroying weapons, and attacking tent emplacements. They should be particularly effective when used with infiltration (army research on the use of rockets from planes and artillery is now in progress and is expected soon to be completed).

Notes:

The following percentages of combat results in the Philippines from 8 January to 8 February this year may be ascribed to raids and infiltrations:

Artillery - 70%
Tents - 90%
Tanks and vehicles - 20 - 30%.

Military - Very Secret

32D ARMY COMBAT DIRECTIVE No. 13

1. The capacity of the enemy's M1 tank to cover terrain must not be disregarded. We must not neglect the organization of anti-tank positions in areas believed to have difficult terrain.

For example, between 3 April and 4 April, 5 enemy tanks advanced against the 62d Division's KADANI Det's UGUSUKU (TA: 8781 W) positions.

2. It is increasingly clear that the enemy's combat strength is in tanks, and that fighting against the American land army is practically the same thing as fighting against the M1 and M4 tanks.

It is necessary that the construction and organization of positions be made in accordance with all the above considerations.

Even though the KADANI Det occupied strong positions in the vicinity of UGUSUKU (TA: 8781 W) and UNJO (TA: 8781 X) the enemy penetrated with tanks on 3 April from the east in the direction of KUBA (TA: 8780Q) and advanced to level terrain at about 0900, 4 April.
3. In order to combat the enemy's infantry strength, it is necessary that we employ by all means high angle fire guns and heavy weapons such as battalion guns, medium mortar, light mortar, grenade dischargers, etc., and not restrict ourselves to rifles, LMGs and HMGs.

4. The enemy's combat methods against cave positions up to the present time are generally understood.

For example:

1. Bombardment and bombings are employed against our troops inside caves and to neutralize our guns.

2. Because of flame thrower attacks (length of the flame is 135 metres) used with the direct support of tanks, or guns and their protecting troops are bottled up.

3. Next, these positions are taken as a result of bombardments of "straddling" (TN: Vertical envelopment?) attacks.
COUNTERPLANS

1. Organize close-in attacks beyond the range (135 meters) of the enemy's flame thrower attacks.

2. Prepare several entrances in such a way that they will give mutual support.

3. It will be most impossible to bring about complete destruction of the enemy doing nothing at all or with all the personnel flinching inside the caves.

4. Maximum effectiveness is attained with the 47mm AT gun by using delayed fire against the M-4 type tank at very close range.

Example:

At about 1200, 4 April, 5 M-4 tanks (one of them was an M-1) attacked hill 85 southeast of Oyama (TA: 8179 VW). With 20 rounds of 47mm AT gunfire they were stopped and set afire, and extensive battle damage resulted.

Successful results are achieved by remaining concealed and through the use of slashing concealed fire at very close range.
This is a translation of a document issued by the Japanese on 12 May 1945. It is directed to unit commanders, and should therefore be of interest to our own unit commanders.

ITEMS FOR THE ATTENTION OF UNIT COMMANDERS

1. When constructing octopus-pot positions remember that the rainy season will soon come, so that permanent installations are necessary; it is also necessary to make wide-hole type trenches where security permits.

2. Throughout the forward zone, scatter and conceal "Jack-in-the-Box" type hidden infiltration sections. They must be grouped so that they can attack suddenly and opportunistically when the enemy advances.

3. In the forward zone the communications nets make very effective anti-tank obstacles. Construct land mine fields (including dummy mine fields).

4. Organize a zone of main positions, especially positions in depth. Also construct "octopus-pot" positions in as large numbers as possible. Construct reserve or dummy positions. The organization of positions should not, however, be scattered, but should maintain the utmost independence.

5. Use grenade launchers when necessary, i.e., support infiltration units, or for deception, or to decrease dead space.

6. Deceptive demonstrations will positively be carried out.

7. When the enemy capabilities are not known, send in infiltration sections; principal objectives are enemy mortars.

8. Soldiers used for daytime lookouts and security require rest at night so as to perform their duties satisfactorily. When daytime security duties have been given to laborers who have worked all night, the enemy has been able to make sudden day-tank attacks.
Guide to Battle Tactics Using Cave-Type Strong Points

PREFACE

I. Although this type of warfare is clearly and thoroughly explained in the Field Service Regulation Manual and the Plan for Defense Against Landings, as a result of changes in disposition and territory occupied and of various maneuvers, specific expedients have been devised. Those things, which should be noted in training, have been added.

Advantages and Disadvantages of Cave-Type Strong Points

Advantages:

1. Suitable for battles requiring independent and highly mobile firepower.
2. As anti-tank strong points, suitable for anti-tank defense.
3. Because of protection from aerial and land bombardment, deterioration of morale is minimized.
4. Facilitates gas defense if properly equipped.

Disadvantages:

1. Inconvenient for command liaison observation.
2. Inconvenient for sudden fire.
3. Security is weakened.
4. Inconvenient for the launching of attacks and counterattacks.

I. In order to make sudden attacks with firepower, the company commander must manage to direct the fire of the major portion of the platoons’ light machine guns and grenade launchers. The battalion commander, as well as carrying out sudden firepower attacks with the heavy weapons under his command, is charged with planning the company commanders’ firepower attacks, the increase of his firepower, and the increase of the effectiveness of his firepower.

II. Since the field of fire from cave positions is restricted, sudden firepower attacks from them are somewhat inconvenient. Therefore the staff officers must organize a fire net and build positions (rifle and gun platforms) for sudden firepower attacks. In order to increase firepower, provision may be made for directing the fire of from one to three rifles (or two rifles and one LMG).
III. In order to insure the effectiveness of a sudden fire attack, attention must be given to the choice of firearms suited to the objective and particularly to the terrain of the point being bombarded. Ordinarily, high trajectory is used in a fire attack in the vicinity of cave positions. There are many cases when battalion guns, trench mortars, and grenade launchers must be properly used.

IV. Of course, high trajectory fire or mutual flank support of the strongpoints, depending on the general disposition, will be employed to eliminate dead spaces. But it is essential that the sleeve-type positions (even the alternate positions) which distribute the main field of fire be strengthened. It is best if the dead spaces in a few depressions be established so that it will be possible to fire from the top and bottom of the depressions and from the vicinity of the rifle (gun) platforms.

V. Antitank strongpoints are essential in antitank action. Consequently, in such action it is appropriate to organize and dispose cave strongpoint positions at relatively close intervals in breadth and depth.

VI. Although the cave position will withstand artillery bombardment, thus minimizing mental distractions and is to a great extent independent, in order to maintain a strong defense, a cave should be organized as a catacomb or sleeve-type position. In this way fighting may be carried on from each strongpoint, each direction, and each loophole. Not only must the position, particularly the rifles and guns, be concealed; but it must also be capable of effectively meeting enemy tank attacks.

VII. Cave positions are inconvenient for control liaison. In order to ensure that all officers and subordinates will always remain under the commander's control, it goes without saying that all measures necessary to maintain communications will be taken. The battalion commander must take special pains to maintain communications with all subordinate units, using radio, dogs, pigeons, and signals (light, flags, written codes, and other codes).

VIII. Since cave positions are inconvenient for a counterattack, when the situation really demands a counterattack, dispositions must be made so that it is possible to shift to an all-out counterattack. This is particularly true for companies and larger units, and for reserve units.

IX. According to the situation of enemy and friendly troops, a counterattack may be used to hold a position or to recapture a position. The two types differ. Either chiefly firepower or chiefly hand-to-hand fighting may be used. The operation may be carried out by the use of mutually supporting strongpoints. In any event, although there are differences between day and night operations, the various officers must thoroughly plan out the disposition in advance.
X. The enemy will use explosives thrown into the caves, incendiaries, and gas against our cave positions, and measures must be taken to counter these enemy attacks. Obstacles and cover must be provided in the vicinity of the rifles and guns. Facilities must be provided in the caves for protection from gas.

XI. Security is weak in cave positions. In addition to mutual protection by strongpoints, provisions must be made for observation and inspection. Each unit must also provide its own security. Loopholes for rifles and guns will be provided with covering panels. There will be sufficient troops in the vicinity of positions. Sufficient troops will be placed at the entrances for direct hand-to-hand defense. Since the use of hand grenades cannot be avoided, special shelters must be provided outside.

XII. Trenches must be prepared at each position, so that in case of damage by enemy attack or bombardment they can be used as alternate positions. Even a single trench may be of great value in holding a position.

XIII. Camouflage is superior to concrete. Once the firing position has been discovered, it will immediately be destroyed or neutralized. If the enemy's attack is unsuccessful, the rifle and gun positions must skillfully be shifted. Sleeve positions and catacombs are particularly effective for this.
32d Army Combat Directive No. 16

We are devoting all of our strength and ability in an endeavour to minimize our own attrition and to maximize the enemy blood spilled.

To do this, special tactics in addition to those of the previous combat directives based on battle lessons, are listed below.

1. Use of the reverse fire principle from complete reverse slope positions.

Utilize the terrain and occupy reverse slope positions as shown in the following sketch to avoid losses from enemy fire (including tank guns). Employ our automatic weapons for short intervals to inflict maximum casualties on enemy personnel.

Reverse fire after the enemy has passed by.

With a dummy position, absorb enemy fire; put the enemy off his guard.

a. Complete dummy positions and concealment.

b. When there is not much time, foxhole positions may be used.

c. This position must maintain liaison with other, rather distant distant positions by visual signals and receive covering fire.

2. At night carry up automatic weapons and penetrate the enemy line deeply. Slip into points where effective fire can be made on roads, fields, valleys etc; where the enemy is expected to assemble or pass through. Wait there and open quick and decisive fire and annihilate as many men as possible.
TRANSLATION

Very Secret (GOKUHI)

February 1945

TAMA 12102 BUTAI (27th Tk. Regt) 3 March 1945
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Observations on Anti-Tank /Tactics/ in Defense
Against American and British Tanks

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      and problems pertaining to the area in front of the position.

1. Introductory Remarks.

This article is composed of observations on anti-tank defense against
American and British tanks as observed from the point of view of mechanized
warfare; it is hoped that it will prove of value for reference.

2. The enemy's methods of tank attacks on positions.

The enemy's doctrine is a tactic of complete flanking and infiltra-
tion through gaps. Using aerial bombardment and strafing he cuts off our sup-
plies, and after planning to exhaust us, it is his strategy and practice to
attack. Thus, he makes raids through gaps in our lines with tank and infantry
units, cutting our supply lines. Making an exhaustive bombardment, he destroys
our fire power and then penetrates from all sides with infantry.

To enumerate recent tank tactics:

a. Penetrating through breaks in our lines to intercept supplies.
b. Using as advance OPs for directing bombardment (artillery and air).

c. Next, attacking with infantry, his tactics are as follows:

(1) Light tanks (moving with the infantry) for reconnaissance in the most advanced line.

(2) If the main tank strength in support of the first line of infantry (medium tanks are used now; they will be used together with heavy tanks) acts in conformity with the topography of Okinawa and the enemy's characteristics, infantry with tank units will penetrate far ahead (about 2km). His strategy is not to show himself, and he is sure to act if he learns that our fire power is knocked out.

The relationship with the infantry is such that the tanks advance (with a rush) just behind the infantry and concentrate the armored fire power along with the ground fire power against a target in the fighting zone.

(3) At times they push forward prepared strong positions behind the first line of infantry to protect infantry guns, mortars, and artillery strong points. (In such a situation, if he stops, /the enemy/, throws up a portable barbed wire entanglement and lays land mines.)

(4) If he encounters a strong front or land obstacles, he avoids flanking by maneuvering in the fighting zone.

(5) When evening comes on, /the tanks/ retreat close behind the first line and go on the defensive.

(6) After the raid has destroyed our anti-tank fire and close-quarters attack by fire power so that the enemy can be confident of absolutely certain victory, he advances, using intense fire and flame.

(7) Even though there need not be a great deal of room in the locality, the second-line units reinforce the fighting strength.

(8) Many plans devised for self-defense.

To do this, /the enemy/ attaches automatic riflemen for direct escort, to each tank. For mutual protection several tanks from the rear protect the forward tanks against close-quarters attack.

3. Our counter-measures

a. Aim

The aim of anti-tank measures, in view of the above enemy tactics, is to prosecute a strategy of surprise attacks unexpected by the enemy and long-range battle dependent upon a supply of anti-tank materials.
b. Concrete counter measures against sudden attack tactics.

It is essential to scatter our strong points and use completely concealed positions in order to induce the enemy to spread out his fire and make him miss his aim and to avoid standing out clearly.

(1) Prevent the enemy from flanking and infiltrating and make complete use of anti-tank zones covered by fire.

For this reason, post troops at proper distances in between positions.

Meanwhile, distribute a part of the troops or patrols and plan the direction of advance fire power for close-quarters attack as well as to close up any openings.

(2) Endeavour to coax the enemy into rough, uneven ground with concealment on the opposite slope when beginning a firing and close-quarters attack at minimum ranges.

It is advisable to make use of the enemy a habitual flanking, etc., and to take the initiative in infiltrating chiefly from natural and constructed obstacles and concealed strong points.

(3) Post the ambush troops and ambush positions over a broad area and annihilate the enemy with a single blow.

Be assured that there are times when this type of anti-tank ambush is particularly to be used in topography such as that of Okinawa and, being a strategy favoured by nature, should be utilized as a mammoth reflector of our armed might. Although no great results are obtained from distributing ambush troops in a line, it should be clear that stationing them over a broad area is definitely effective. If, in this type of fighting over a broad area, every one in the unit, from the commanding officer on down, has courage and burns with a spirit of self-sacrifice and boldness and is not resigned to inevitable defeat, then we may expect real results.

(4) A distribution of hastily installed obstacles (usually land mines) and close-quarter attack strong points makes for confusion of the forward tanks. (After the forward units have passed, the rear tanks (units) are lax and careless.)

Further, the land mines and close-quarter attack units, which have been quickly thrown in at the very same spot which had been previously passed, give rise like a bolt from the blue, to confusion among the tanks which pass the self-same spot the second time.

It is hoped that in a defense which has the advantage of utilizing topography and time to make preparations, this type of planning will be studied thoroughly and suitable use will be made of the terrain and topographical features.

(5) Take advantage of actual conditions.
Mislead the enemy's reconnaissance and his judgement of your rate of speed.

To do this when retreating several hundred yards at a time, oppose him stubbornly in one spot or move your strong points forward, left and right.

c. Notes on long-term anti-mechanized warfare.

(1) At times it is important in defense to insure the accumulative, protection, saving, and supply of anti-tank personnel and materiel. It is extremely necessary to use originality and initiative in the use of materiel and cleverness in taking advantage of the enemy's.

It is wise to attempt to keep the best men and leaders of the close-quarters attack until the last.

(2) Be prepared to shift positions in succession.

Further, it is essential to give special consideration to the protection of guns and ammunition.

(3) In simple measures against mechanized forces, it is necessary to coordinate the various unrelated types.

As direct anti-tank measures there are tank attacks, mine fields, etc., making use of anti-tank guns, close-quarters attacks and airplanes. It is clear from an examination of recent battles that in modern warfare, by putting together the various types of anti-mechanized measures and attaining the desired objectives, or with simple anti-mechanized measures, such as guns alone or close-quarters attack, small temporary results are obtained and at the next opportunity the enemy is destroyed.

In this connection, there are valuable lessons especially when there is a small number of guns.

(4) Carrying on a long-term flight with little anti-tank material can easily result in ultimate failure. In a close-quarters attack with a group of 2 or 3 guns, even if it is possible to injure the enemy by undertaking a sudden attack, it is clear that there are many lessons to be gained in the failure of anti-mechanized warfare resulting immediately in destruction.

In particular against American tanks which are advancing infantry to the fore, with the proper spirit as well as fire power, a real anti-tank battle during the day-time with a few guns is likely to fail.

This is the reason in modern warfare, for not allowing in one minute more than one round from anti-tank guns in the same position.

d. Other counter-measures
It is essential to scatter the enemy soldiers and annihilate them individually. It is particularly important, since it is an ineffective principle to repel tanks, and an appropriate one to annihilate them completely.

Notes on special counter-measures to knock out the enemy tanks (one example),

(1) Construct trenches in two levels - a narrow one for personnel and a wide one for observing enemy tanks - and with these knock them out.

(2) Improvise various types of devices to pierce the bottom plates.

To do this make use of step-like slopes, uneven ground, rising slopes, logs, and shell holes, etc. Plan for ant-hill-like tank traps, in conjunction with gun fire and close-quarters attack at the instant the tanks advance. Destroy the bottom plates from the bottom of the trenches as the tanks cross.

e. Miscellaneous studies and problems pertaining to this type of defense.

There is a great difference between the enemy's and our equipment, but if we make plans for a decisive fight with superior fire power and make our primary objective the cutting off of the enemy's supplies, a great difference may be expected the design of future defense against the enemy who faces us.

(1) The main objective of defense.

In armies such as the German and Soviet, it is not possible to make anti-mechanized warfare the main objective. That is to say, they place implicit reliance and trust in all sorts of air and ground fire power. Further, in addition to keeping an eye on the interception and attrition of the enemy's supplies, at first we endure bombardment from completely superior power and devise ways and means for intercepting supplies on both the air and ground sectors. We must, however, study future anti-tank actions.

This matter exerts a great influence even on command and organization and posting of positions for anti-mechanized action.

f. Positions.

(1) Location.

In consideration of future anti-tank strategy, stress shall be laid upon the use of terrain and topography where movement of enemy tanks is difficult; still, the enemy's blanket bombardment changes the topography. Further, it is impossible to defend a mountain top or cliff-summit only, if it is remembered that the usual condition is to advance, seeking a moment when the enemy is not striving to pierce our positions.
Rather, in rocky ground, facing slopes in river valleys, etc., consideration should be made in particular if a defense which includes anti-mechanized warfare.

(2) Organization (organization of positions)

Future anti-mechanized warfare will be built around a network of overlapping positions (TN - "scale-like"), but the strong points easily fall under concentrated enemy fire and besides they are not able to block an advance through gaps /in the line/.

There are large, medium, and small strong points, and near the line of positions there is a dispersion of fire points.

In short, fighting along a front line is not absolutely advantageous and it is necessary to fight at the same time along a front that is not properly a front.

If you consider the above requirements with the problems of resistance to fire power and of supply, a working arrangement must be made between the outward appearance and continuous supply of the strong points.

The distance between strong points (position for anti-tank fire power) should be proportionate to the enemy's armored strength. Further, in selecting covered ground as a battle field, it is essential to shorten /this distance/ by degrees.

The effectiveness of the present 300 meters is doubtful.

(30 "Annihilation before the position and strength within the position" and problems pertaining to the ground in front of the position.

Do not establish an anti-mechanized line before the positions, in connection with a frontal defense.

Do not set up a defense belt near a complex front line.

Once, however, the enemy has established an armored strong point within the position, it is extremely easy to run into difficulty in the modification and defense of the position and in general leadership. Consider long-term defense; anti-mechanized tactics involving direct advance and infiltration and anti-mechanized obstacles in numbers before the position sector has gradually gained more importance.
The following translation is a lecture given by the 32d Army Chief of Staff, concerning infantry combat training methods:

**OBSERVATIONS BASED UPON INSPECTION OF POSITIONS OF VARIOUS UNITS**

1. **Organization of Positions:**

   In organized positions, some small arm ports and gun embrasures are conspicuously exposed to naval gun-fire. Others have been constructed in high positions where they can be easily discovered by the enemy. Furthermore, others have a maximum of dead space and a minimum of shelter. In view of combat experiences on Iwo Jima (in the three (3) day period prior to landings, six (6) out of eleven (11) casemates were destroyed), it becomes obvious that under such conditions casualties will increase. It is therefore necessary to improve and organize positions, so that cover will be provided by natural terrain features and so that flanking and reverse fire can be delivered.

2. **Weak Points of Underground Positions will be Strengthened:**

   a. By eliminating dead spaces and by constructing connected mutually supporting and self guarding positions.

   b. By establishing anti-flame, anti-gas defense installations.

   c. By effecting measures to protect gun ports and embrasures against tank fire (75mm) and shells.

3. **Construction of Dummy Positions:**

   The construction of a great number of dummy positions will not only force the enemy to disperse and waste his abundant resources over a wide area, but will also decrease damage to our positions. This will increase our power of resistance.

4. **In attacking tanks, firepower and suicide attacks must be closely coordinated:**

   Because firepower against suicide attacks, full use will be made of automatic weapons to annihilate infantry troops riding or accompanying enemy tanks. Suicide attacks will be coordinated with fifteen (15) seconds of surprise fire; active mine attacks (TN: KATSU JIRAI KOEIKI) will be carried out. Suicide attachers and automatic weapons men will operate as one unit to effect destruction of enemy tanks. Reorganization is therefore extremely important in order to coordinate firing and suicide attack teams.

5. **Construct surprise "Jack-in-the-Box" type positions:**

   (TN: BIKURI BAKO SHIKI JUNCHI) (key attack points) within anticipated bridgehead areas.

   Because of the difficulty of infiltrating into enemy bridgehead areas which are covered by intensive nets of fire and obstructed by obstacles, establish surprise "Jack-in-the-Box" positions (caves as attack key points) in advance. In coordination with attacks from our positions, our men will appear unexpectedly among the enemy, create confusion and annihilate them.

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Theirs will be the extremely important mission of confusing and annihilating the enemy from within. When these surprise "Jack-in-the-Box" type positions are numerous and superior, they are of extreme value in affecting the outcome of battle.

In view of the present situation in which the army is increasing its personnel by defense mobilization, and the existence of favorable terrain in coastal areas of anticipated attack, double consideration should be given to the practical application of those surprise "Jack-in-the-Box" positions. To thus establish a road to victory by tactics peculiar to the army is of vital importance. Therefore, troops should endeavor to camouflage fully entrances to hidden caves.

It is believed that one good plan is to deceive US troops by constructing naturally sited outhouses, which US troops thoroughly dislike, near the entrances to the caves, thereby causing them to avoid these areas.

11. Because of modifications in the construction of M-4 tanks (louvers protecting air intake and exhaust tubes have been moved from front to the rear), flame attacks should be made from the rear of the enemy tanks.
The following translation is of a mimeographed Battle Training Bulletin of the 32d Army Hq on cave positions and other field fortifications, classified VERY SECRET, dated 16 April 1945. This document was captured by the 7th Infantry Division, 28 May 1945 and translated by XXIV Corps ISO.


1. Discussion of Cave Positions:

   a. Cave positions may be considered safe from all types of artillery bombardment. As our fighting strength is certainly at its peak now, spiritually and materially, careful consideration must be given to the use of caves.

   b. In view of recent combat training, the following items should be carefully weighed in regard to the value or liability of using cave positions once the enemy has begun close-combat warfare.

      (1) Once fire is delivered from an embrasure (of limited value), it is immediately discovered by the enemy, and receives terrific fire from the enemy, thus seriously limiting its value in close-combat warfare.

      (2) Once the embrasures are destroyed, cave positions are useless resulting in great loss of men and materiel at one blow.

      (3) Guards posted in cave positions or even in field positions often abandon their posts and fling themselves flat on the ground.

2. Wide scope in use of field positions, especially the bell-type positions.

   a. In view of the characteristics of the aforementioned cave positions, especially their weakness once close-combat has begun, connecting bell-type positions should be established all along their front to compensate for this shortcoming.

   b. That is to say, although the main force of the guards should utilize the cave positions during periods of NGF, air attacks and long range artillery bombardment, increasing use of the bell-type positions should be made in the event of trench mortar or tank attacks. Close-combat warfare should be continued from both positions and when cave embrasures are rendered useless, all troops should fight fiercely from the bell-type positions.

   c. Once close-combat warfare has begun and cave positions become untenable, great numbers of casualties will be incurred if personnel remain in the caves.

3. The vital need for concealed, camouflaged and alternate positions.
a. It is essential to conceal and cover all cave and bell-type positions until our fire power can be brought to bear. This matter is certainly to be considered at the outset in the construction of positions, carried out as time permits even after the commencement of battle and must be made the basis of the continuance of defensive warfare.

b. Against an enemy who aims to destroy superior fire power, it is absolutely necessary to construct numerous alternate positions and to fire in short bursts while moving to the various dispersed positions so as to increase the effectiveness of our fire. According to the experience of the front line units, firing from any one position should be of no longer duration than 20 seconds.

c. The value of dummy positions has been well attested by various units, especially as regards the waste of NGF on our many dummy positions. Even after the commencement of close-combat, by untiringly devoting oneself to original ideas and constructing many such positions regardless of the labor involved, their value can be increased many fold. Thus, planning to force the enemy to scatter and waste his fire will be of tremendous value to our defense effort.

4. Protection of weapons.

a. A half-month of intense front line combat has made for great losses and expenditure of weapons. Most careful though must be given to the protection of weapons at the positions; to conceal only personnel and to leave the weapons in the embrasures gives a target to the enemy and is wrong. Even if one falls in combat he should pass his weapon on to another. In view of the present weapons situation, he should also cultivate a positive love for his weapon to enable it to give him the maximum fire power.