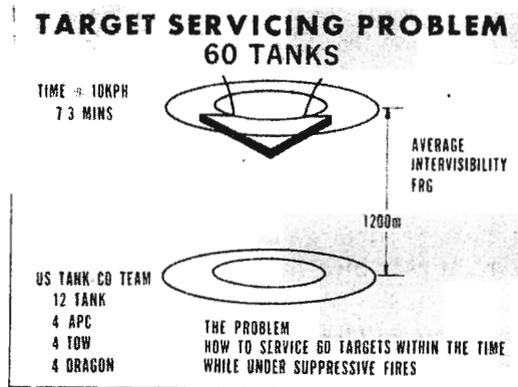


"Real" Readiness
Speech by MG Paul F. Gorman
DCST, HQ TRADOC to the
Command and General Staff College
Officers' Symposium on Officer Responsibility

What is this business called training, training management, or readiness? I would suggest, as a way of clarifying what it is that we ought to be discussing here, a different frame of analysis. It is one which is immediately at hand here at Leavenworth. It is in fact the problem which next Tuesday is going to be presented to the high command of the Army when they meet here for the Armor Systems Program Review. There the senior officers of the Army, headed by the Vice Chief of Staff, will meet to discuss what it is the Army confronts in terms of the Armor threat, and what it is that we ought to do about it both now and over the next ten years. That's what the Armor Systems Program Review is all about. Now, Leavenworth wisely, it seems to me, starts the Armor Systems Program Review with a characterization of the problem in terms of this first slide. Down at the bottom of the diagram is a US tank company team equipped as shown. At the top of the slide is a Soviet force of some 60 armored vehicles. The Soviet force is attempting a breakthrough. The average inter-visibility distance in Europe, where such an attack might materialize is about 1200 meters. Now this inter-visibility distance, and the speed at which a Soviet force of this sort can traverse the distance between the first mask and the battle position, dictate what you might refer to as "servicing time". This tank company team down here ought to be able, if its going to come out of this whole, to take care of 60 targets in that period of time.



Now, gentlemen, whether this is a correct characterization of real readiness or not, this is a problem which is being put before the decision makers of the Army. It is on this basis that we are asking the Vice Chief of Staff, the DCSOPS, the DCSRDA, and the other senior officers who make decisions on weapons systems acquisition to decide what to do about this problem. So I suggest to you, just for the purposes of my discussion this morning, that you allow me to address some of the realities which pertain here. In the first instance, obviously, the key element in the US team are these 12 tanks. I'm going to present to you a series of observations about US tank crews and tank crew training. I can assure you that I could present equally cogent data about the crews of the TOWs or the Dragons, but I happen to have in hand a repertoire of recent material on tank crew training that I think bears on the problem, and it fits very nicely with what our conference is about. So I'm going to be talking about these 12 particular tanks, and their problem in dealing with this enemy force in that amount of time. Obviously, theirs is a relative problem: the outcome is not only a matter of how good the US fellows are down here, but how good they are that are coming from up yonder. We should appreciate that the Soviet tank crew is raised by a conscription system, and each member is in service for two years. He is trained from the outset for one specific job in the tank crew, and he remains in that specific job for his entire period of service. He comes in, in other words, and is vetted. He is designated as either a tank commander, a gunner, a loader or a driver, and then

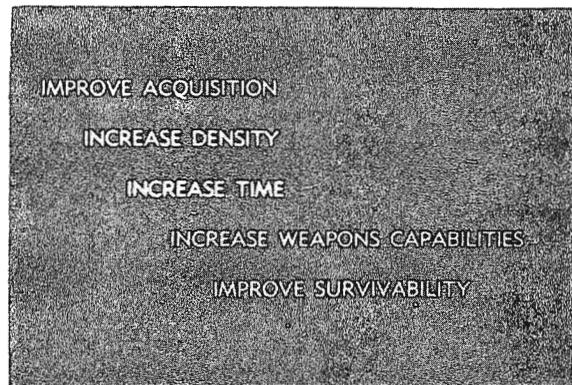
SOVIET CREW

- ◆ LATERAL ENTRY
- ◆ 6 OR 12 MONTH STABILITY
- ◆ FREQUENT TRAINING IN INDIVIDUAL AND CREW FUNCTIONS
- ◆ VERY LITTLE CROSS TRAINING
- ◆ EMPHASIS ON COMBINED ARMS TRAINING
- ◆ TANK GUNNERY EMPHASIS:
 - MASSED FIRE
 - TARGET DISCRIMINATION
 - ROUND SELECTION
 - "GRAZING SHOT"
 - USE OF SIMULATORS AND TRAINING AIDS

he goes to a school for that specific job. That's what we mean by lateral entry. Further, the Soviet system provides for inputs to the tank crews on a six month cycle, so that if there is any instability in any given tank crews, it occurs on a date certain, the 6th or the 12th month in the training year. Far from training annually, Soviet tank crew training takes place constantly throughout the week. There is monthly firing. Our first speaker cited the salubrious practice of firing tank crews quarterly. The Soviets go a step further; they fire monthly. Our speaker mentioned the application at his post of sub-caliber firing, which is right on. He has devised and built in his own shops a fine 20mm sub-caliber device. But Soviets are years ahead of us in such development. They have had for years a 23mm sub-caliber device for their T-62, and they practice with it and fire it regularly. They are far from having to worry about SD problems, such as cited by both previous speakers. In the Soviet tank battalion there is no special duty. Nobody from a Soviet tank crew is sent out to bury veterans, nobody worries about post details. That is handed off to the motorized infantry, and other lesser minions in the Soviet force. It is literally true that the Soviets fore-close placing tankers on anything that even remotely resembles special duty. There are rigorously enforced minimums of tanker training that must be accomplished weekly whether the Soviet gunner or tank commander or driver or loader needs it or not. Let me make a very important point: What the Soviets practice constantly is offensive action. Their tank ranges are laid out for a head-on attack, just exactly as we have diagramed in the previous slide. They never fire just one tank on a range; there's always a platoon on the range;

the platoon is always presented multiple targets. They fire on the move, or from the short halt, as the target situation may dictate, but it is very clear that what they want their crews to master is a head-on, dashing attack, right into the heart of an enemy position. All of the targets always appear dead ahead of the Soviet tanker, in the sector immediately to his front, and he is expected to engage while moving. There is a substantial amount of firing of the main gun at infantry targets. This is a formidable force, well worthy of our respect. Their training management practices are significantly different from our own, but they fit their force to fight the sort of battle we are talking about.

Now what do we have to work with in order to improve the capability of that US tank company team to stop this threat? These are the considerations which the Command and General Staff College will use in its Armor Systems Program Review: The decision makers will be asked to approve, or at least take into consideration, ways of bringing about these kinds of improvements. Now here we're talking about increasing weapons density: more TOWs, more tanks, etc. Obviously, in training management you and I cannot address that kind of a proposition very well. Certainly at the company level it is not a real consideration. Perhaps at the level of the colonel or the general, where we might be able to bring about increased density in the particular sector of the tank company through concentration, or better tactics, we can address it in training--reinforcements via TOW Cobra, etc. But let's set that one aside. By increasing time we mean slowing down the attacking force by aerially laying mine fields, or by obstacles previously

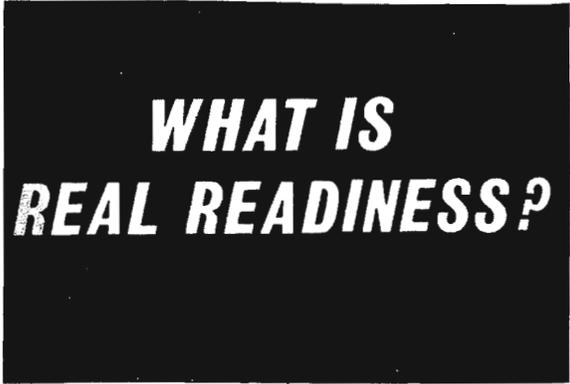


set into the terrain, so that we increase the "time gate" that we have available to operate on the attacking force.

Again, most of the means and measures that we could resort to today are beyond the framework of training management.

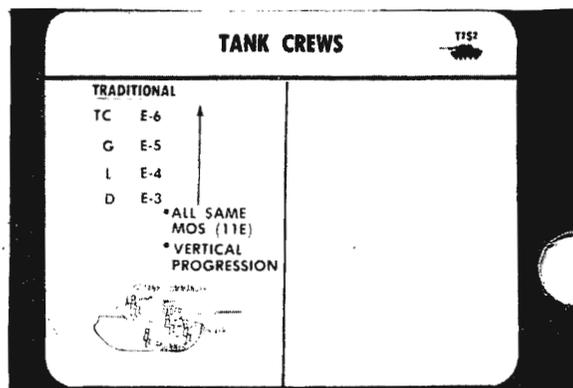
Survivability, yes, we can address that in training: hull defilade, better field fortifications and the like. Yes we can increase the survivability of the force, and that is something we can take a crack at in training. But as my remarks here this morning are intended to suggest, the principal gains achievable with today's people, today's soldiers, and today's weapons systems would lie in an increase in our ability to acquire targets and to increase our weapons capability. Now, by acquiring a target we mean simply seeing the target, deciding if it is a foe, and whether or not to fire at it. And I'll show you here in a moment we've got a lot of drawbacks in our present system for being able to do that. In terms of increasing weapons systems capability we can increase the accuracy of our crews substantially, and we can increase the rate of fire of our crews substantially. I will quantify what I believe are the improvements possible within the present frame of training management.

Here, gentlemen, is what I think we ought to address. And when I use the word "real" I don't mean to imply that other problems of readiness are unimportant. What I'm driving at here is the capability of our tankers to deal with a situation such as I've painted at the outset. Now, who is out there in those tanks? What I'm going to do is to describe to you the force today. I'm going to show you a range of data about the soldiers who actually man our tanks. I'm going to be talking to you on the basis of two very recent surveys, one of which was collected in some 15 armored battalions within the past nine months, both in USAREUR and in the continental United States. We surveyed



**WHAT IS
REAL READINESS?**

in this survey about 20% of the serving tankers of the force. We have collected 84 items of information concerning each man in each tank crew. In that first survey we looked at the tank crews at the time they were at their training peak, the time when they were sent down Table VIII, the time when presumably they were most ready in terms of their ability to handle the gunnery mission. The second survey was a "come as you are" look at the force, where we sliced through a comparable sampling throughout the Army, and tried to get a picture of the force as it existed on any old day, like today. I want to tell you that both surveys produced compatible data. That is, both probes produced correlatable findings. Understand, as we talk about tank crews that, in accordance with the Enlisted Personnel Management System, what is supposed to be out there today is the crew in which we have provided for career progression from E-3 through E-6. A man is brought in initially as a driver, because the presumption is that the American tanks are easy to drive, driving skills are held on entry by the greatest number of soldiers and, therefore, that's the proper beginning of a tanker's career. He then progresses to a loader E-4. The reason that the loader is of higher rank today is out of realization that the loader has a hatch, he has his head out of the tank, and so he figures in that target acquisition task that I referred to earlier. You all ought to understand that while the loader is essentially a muck artist (dependent upon physical prowess) he is confronted today with add-on stabilization, where his task can be vividly characterized in one expert's terms as "the problem of



putting a suppository into a panther." The loader affects rate of fire directly. The gunner, E-5, is the fellow who has his eyeball at the telescope, who makes the decisions on where the reticle shall be lined up. He has direct bearing on probability of hit, or accuracy. The tank commander, E-6, is the senior member of the crew. Of course all of us who have thought about this over the years have a vision of a leathery-faced old tanker, with years and years of service behind him heading up that tank crew. It just doesn't look like that in the real world. When you look at the tank crews of the US Army one of the things that strike you in the first place is that one out of four guys out there didn't even go through armor AIT. The earlier criticism of the training base, however cogent it may have been reference those infantrymen that we sent out to any one unit, is very much the point here. Of the tankers that we surveyed, a quarter of them hadn't even been through the Armor Training Center. As a matter of fact, here in CONUS we found battalions where one out of four guys that were assigned to the crews weren't even in the 11E MOS. Now when you look for that leathery-faced tanker that we were just talking about - he isn't there to lead the amateurs. Half of the tanks under the command of enlisted men in the Army are in the hands of E-5's. Seven out of ten of the fellows who put their eyeballs at the telescopes of our tank are on their first term of enlistment. We're an Army of neophytes, fellows! As a matter of fact, an astounding percentage of these tankers have had only one formal tank gunnery season.

TANK CREWS

◆ 89.1% ARE 11E

◆ RANGE

CONUS: 74.9% - 97.7%

USAREUR: 83.0% - 96.7%

74% - AIT TRAINED

11E TC AND GUNNER SHORTAGES

TC			GUNNER		
E3	6	-	E2	24	-
E4	22	53% 11%	E3	69	69% 24%
E5	114	-	E4	171	-
E6	82	-	E5	113	-
E7	44	-	E6	4	-
	268			381	

Here is an even more interesting indictment. What you're looking at here is the physical profile of tank crews. By regulation, tankers are supposed to be "picket fence" profile one. What you see here are the numbers of tankers surveyed. What's interesting of course is the frequency with which one encounters guys in tank crews with a profile 2 in the eyes. Now let me show you what profile 2 amounts to. Profile 2, gentlemen, is a "Willie Weak Eyes." Here is what you are when you're Profile 2. You can have any one of these conditions. You pay, gentlemen, a very substantial price for putting somebody in a tank in a position to acquire a target who has weak vision. That price can be depicted as follows. What I'm showing you are the results of trials at China Lake, in which we took individuals and asked them to detect tanks or APC's at ranges out to 1600 meters. As you can see, there is a very substantial difference in time to find the target, between a man with 20-20 vision, whether corrected or not, and a man who has defective vision. So any of you -- company commander, battalion commander, division commander -- who allows the profile 2 soldier to man a tank in a position where he might be called upon to acquire targets have sacrificed a substantial number of seconds out of that time gate we talked about earlier.

PHYSICAL PROFILE

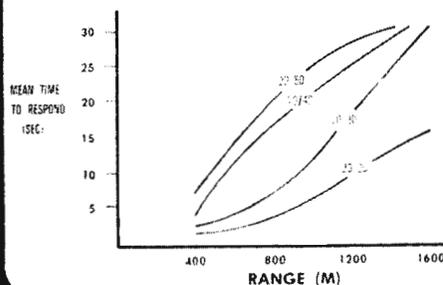
CATEGORY	PROFILE (PROFILE)	FREQUENCIES		
		1	2	3
P (physical)		947	6	7
U (upper extremities)		948	10	0
L (lower extremities)		947	9	3
H (hearing)		933	23	3
E (eyes)		731	228	1
S (psychiatric)		941	7	0

VISION PROFILE

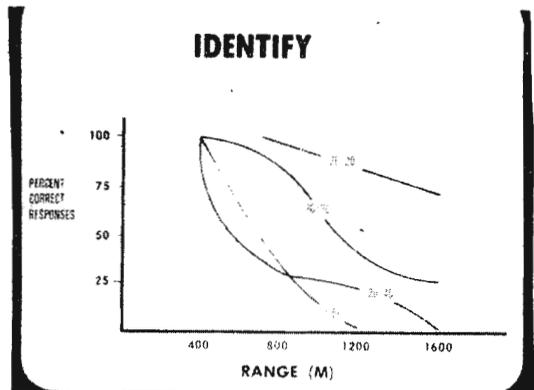
PROFILE

- 1 — UNCORRECTED VISUAL ACUITY $\leq 20/200$
CORRECTABLE TO 20/20
- 2 — DISTANT VISUAL ACUITY CORRECTABLE TO:
- | BEST EYE | WORST EYE |
|----------|-----------|
| 20/40 | 20/70 |
| 20/30 | 20/100 |
| 20/20 | 20/400 |

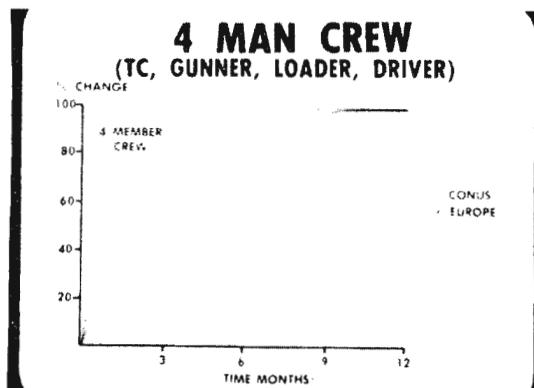
DETECT



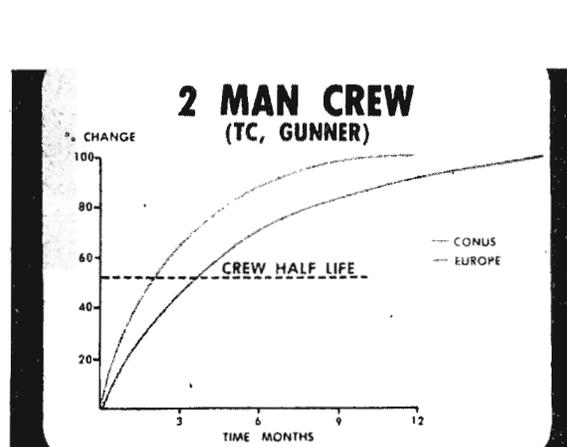
Further, once you detect a target, you have to decide whether or not it is friend or foe. In these trials the man with 20-20 vision got correct identification responses, at ranges shown, while the fellows with defective vision were just out of the running. Now let me make a point. It wasn't MILPERCEN, it wasn't the DCSPER of the Army that waived those profiles. It was thee and me, friends. It was company commanders and battalion commanders and division personnel offices that did it. Not the system -- It was you and I. We put those profile 2 guys in those tanks. And we did it, I suppose, for cogent reasons. There were shortages of personnel overall, and we were impelled to keep the equipment manned and maintained. But what I want to get across to you is when we did so, we payed a price in readiness for that, in real readiness, just by allowing the "Willie Weak Eyes" to man your tanks.



Let's move to another point. There has been a lot of discussion here about personnel turbulence in the Army. Here's a way of showing it. What we're looking at is a statistical presentation of what happens anytime you change one guy in the crew. What this chart shows you is that every quarter, whether in CONUS or in Europe, about 80% of the crews of the US Army have had one job change or another. Gentlemen, a tank crew, as the name suggests, is a team. The ability of that crew to operate rapidly together is affected each time there is a change in personalities. There is wide spread unanimity among the tanking community, at all echelons, from general right on down to PFC that instability interferes with teamwork. If they're agreed on one thing, -- its very hard to get iron heads to agree on anything -- but if they're agreed on one thing, it's these changes screw up training. It makes it more difficult to fight the tank. Now somebody will say, "Yeah, but drivers



and loaders are not as important as the tank commander and gunner." That's right. But when you just track those, when you ask yourself: "How about changes just to the tank commander or just to the gunner?" you get a picture like this. And this tells you that every three months 50% of crews have undergone a change in Tank Commander or Gunner. So you see the first speaker is right on. Firing tank gunnery once a quarter is just about right. And the Soviets are probably correct when they indicate it ought to be done more often. But if they had to put up with this kind of turnover, they'd probably have everybody firing once every three days. Turnover is a real problem to address in training management, gentlemen. What or who causes that? Now there will be all sorts of fellows out there that are thinking growling thoughts again about the DCSPER and the MILPERCEN, about USEUCOM for Brigade 75, and blaming all sorts of other fellows. That's fair enough. But note: Twenty-two percent of the recorded changes in crews occurred by changing within the crew. Somebody who had been the driver was made the gunner, somebody who was the gunner became the tank commander, or there were other changed positions within the crew. Seventeen percent involved changes from one crew to another within the platoon or the company. Eleven percent within the company to another platoon, eight percent out of the company, seven percent out of the battalion. When you add up these upper numbers, taking the rounding out of it, over half of those changes were countenanced within the battalion by somebody of the rank of LTC or under. We did it to ourselves. Here's another way of looking at the problem.



CREW TURBULENCE: WHERE AND HOW MUCH ?

<u>WHERE</u>	<u>MINIMUM % / MONTH</u>
POSITION	22%
CREW	17%
PLATOON	11%
COMPANY	8%
BATTALION	7%

57% OF POSITION TURBULENCE CAUSED BY PERSONNEL CHANGES WITHIN THE BATTALION.

his M60A2 is a very complicated weapons systems, as any tankner will attest. One does not come by it easily. Once you've got it, you got a great weapons system -- out at 3000 meters a high probability of hit -- but look at how we're manning it. Look also at what the force really is doing to itself with this management of tank gunnery on an annual basis. You know, we went to training on an annual cycle back in the days when we had to let the soldiers go home to harvest the crops. It is about time for us to change our approach to life. We've got to be thinking about gunnery in different terms. Every now and then there will materialize on the horizon some fellow or other who, to save money or range-time, says once every 18 months is good enough. The answer must be this: Not in today's Army! Not with the turnover of personnel we're up against! Assuredly, we cannot expect to fight the force on the day we complete Table VIII. No, that's not the day the war will begin. We'll have to cope with the Russians on the day they start the war, whenever the war materializes. Most tank battalions will be more than three months off the range. Well, if you were to go back to those 12 tanks we were talking about, would you believe that a couple of them will be commanded by men that had never fired Table VIII? Would you believe that most of those loaders, whom we're going to be counting on to ram home those rounds fast to get high rate of fire, nearly half of them have never fired Table VIII? We're an Army of amateurs! Now, that problem can be remedied. Proper management can do it. You can't blame the system for all of it. The system certainly contributes, but a lot of the problem is solvable within the purview of virtually every person in this room. Earlier I mentioned

STABILITY: THE EXTENT			
CATEGORY	CONUS		
	M60A1	M551	M60A2
% OF CREWS TOGETHER MORE THAN 3 MONTHS WITHOUT CHANGE	29%	25%	17%
% OF CREWS THAT TRAINED MORE THAN 3 MONTHS PRIOR TO TABLE VIII	22%	23%	21%
% OF CREWS THAT REMAINED TOGETHER MORE THAN 1 MONTH AFTER FIRING TABLE VIII	50%	56%	36%

ACTUAL PRODUCTS OF TURBULENCE

PERCENT OF CREWMEN WHO HAVE NEVER FIRED TABLE VIII	CONUS	
	M60A1	M551
TANK COMMANDER	10%	
GUNNER	13%	
LOADER	42%	
DRIVER	29%	
Average	24%	41%

the unanimity on the view that turbulence seriously hindered training effectiveness. Another way of saying that, is to report that tankers don't like their jobs. Sixty-five percent of the crewmen, and more importantly, four out of ten of our tank commanders want to change their MOS. When a tanker reenlists, and reenlistments in 11E are comparable to other MOS's, he doesn't reenlist as a tanker. That's one of the reasons why we have those shortages of NCOs out there. They disenlist from the tank corps. And yet, this is what we identify in FM 100-5 as the most important weapons system of the US Army. The XM-1 is right up at the top of the list of weapons systems that the Army says it wants, tells the Congress it needs. We're always looking for tank product improvement. TACOM is working on three or four ways of making the existing fleet better. But that's what we've got out there in terms of job satisfaction, and part of that is occasioned by the turbulence phenomenon. How well can the force fight? Gentlemen, we're going to have to deal with moving targets. Virtually all of the ammunition fired by our tanks is fired at stationary targets -- eighty percent of it! We fire 100 millions of dollars of tank ammunition every year. Most of the time we're firing at stationary targets. Such firing as we do at moving targets is by and large at flanking targets, that is the flank view of a panel target on a fixed traversing course, that is to say the target is going across the front of the firer. This is an unrealistic situation because, as we said at the outset of the problem, it is an advancing force that is closing as rapidly as possible. You're going to have a front-on view of a closing target coming at you as rapidly

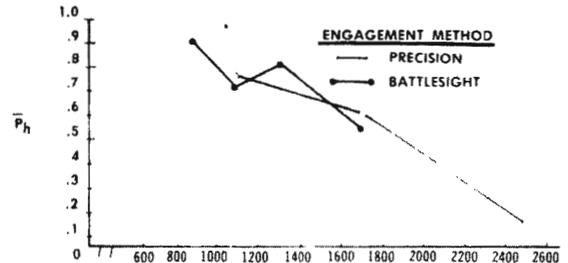
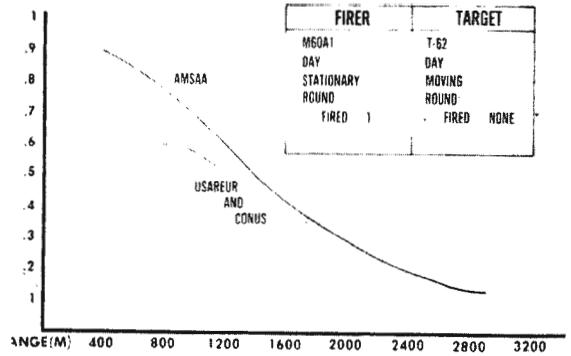
JOB SATISFACTION

55% LIKE CURRENT JOB

BUT

43% OF ENLISTED TC AND
65% OF OTHER CREWMEN
INDICATE DESIRE TO
CHANGE MOS

as it can move. The data that we have from our firing suggests that the tank weapons system ought to perform as shown on the black line. The actual capability of the force and the probability of hit over range both in USAREUR and CONUS is shown below. We ain't as good as we could be, and we could be a hell of a lot better, as the following data will suggest. We spend a lot of training time teaching what the tankers refer to as the Precision Method of firing -- with ranging and all that. There is a technique of fire referred to as battlesight, which, as this data suggest, produces accuracies in terms of probability of hit which are virtually comparable to the Precision Firing method out to 1600 meters. So the first point about this slide is that in terms of accuracy, at least out to 1600 meters, battlesight is as good as precision firing. And we therefore ought to put a lot more emphasis in training on the use of battlesight. But the big difference has to do with the amount of time that you have to service those targets. These figures show that battlesight offers, day and night, a 100% improvement in speed of engagement. Obviously, he who can engage fastest, shoots first and fires more frequently. There is a direct impact on the rate of fire here, both day and night. Now, let's put this all together. Here is a depiction of the force as we surveyed it over one year. I'm showing you here data points taken from actual firings, in terms of our ability to cut down that opening time. Starting back in March 1975, in our sample, we tracked battalions that went from about 20 seconds to something under 10 seconds in opening time. This improvement was during the period of intensive tank gunnery training. We went back in December 1975 and discovered that the crews of the same tanks had increased their opening time to 20 seconds. So you have a forgetting



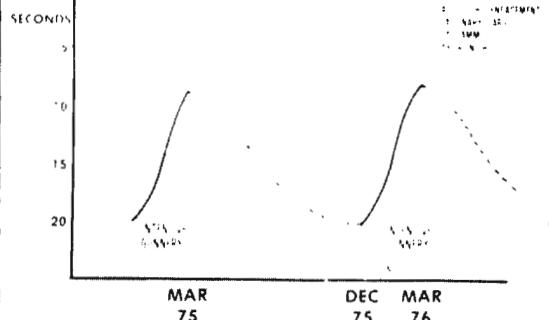
FIRST ROUND MEAN HIT PROBABILITIES (\hat{P}_h) OF CONUS TANK CREWS ON TABLE VIII A (DAY).

ENGAGEMENT METHOD: PRECISION AND BATTLESIGHT
 TARGET MOTION: STATIONARY
 AMMUNITION: HEAT

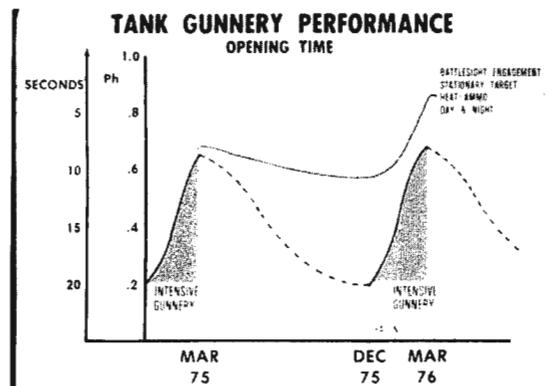
OVERALL FIRST ROUND MEAN FIRING TIMES
 (TARGET MOTION: STATIONARY; AMMO: HEAT)

SOURCE	ENGAGEMENT METHOD		MEAN DIFFERENCE
	PRECISION	BATTLESIGHT	
TABLE VIII A (DAY)			
USAREUR	14.28	7.58	6.71
CONUS	18.97	8.49	6.48
TABLE VIII B (NIGHT)			
USAREUR	15.39	10.78	4.61
CONUS	23.80	11.99	12.31

TANK GUNNERY PERFORMANCE
 OPENING TIME



or degradation curve that shows time falling off during that period. Now, of course, this falling off is a function of the turbulence, and it is a function of annual training. It is a function of a whole series of neglects or misapprehensions or failures to follow through. But that's the capability of the force as it was in December 1975. We then brought the capability back up again during the intensive gunnery cycle. Let's overlay on top of that the probability of hit or accuracy and you get a picture that looks like this. I've put another ordinate on here, and we'll use the same abscissa, and you get a relationship like this. From the left peak to the trough is a falling off of about eighteen percent probability of hit. In other words, the penalty paid by that commander in terms of accuracy was about 1/5 of his weapons systems' capability. You get 1/5 less hits out here. Then the recorded improvement in the probability of hit during the gunnery cycle was almost thirty percent. During that intensive gunnery cycle we saw a very substantial improvement in the capability. I've got to tell you that the data over this year shows indeed that in virtually every battalion of the Army that we're getting better in tank gunnery. This is particularly noticeable in CONUS where we have had a greater opportunity to use mini-tank ranges, sub-caliber firing, and other interventions in the tank gunnery business to take it off of the annual cycle and to cope realistically with the turbulence problem. But for the purposes of this discussion, note that training can produce very significant differences in the ability to fight the kind of battle that we foresee. Differences in the order of 100 percent in firing time, and on the order of thirty percent in accuracy. Those differences, gentlemen, could be the difference be-



tween victory and defeat. As an aside, it may be possible to improve tank gunnery more with training than many of the nifty gadgets that the Armor Systems Program Review will consider. Now, the data that I have shown you has used as a measure of effectiveness the Table VIII. Those of you who know anything about it understand that Table VIII is a single tank in trouble. You've got a crew going down a range road; the targets are marked with barber poles; the entire situation smacks of unreality. What we're practicing -- as opposed to the Russians - is duck shooting. They're gearing up for offensive action, we're out there doing an exercise similar to a shooting gallery. We've got to improve our tank gunnery tables. The Armor School is working hard at that. This summer there will be published a new FM 17-12 which will prescribe tables in which we will engage by platoon; we will engage multiple targets; we will engage target arrays that are changed frequently, and which can be adapted to existing conditions of intervisibility. You know, we won't wait on the range till the fog lifts; we will shoot because in the fog's when you're going to have to do your fighting. We may even be able to come to what I refer to as "a probability scoring system" where qualification will be a function of the established difficulty of hitting the target -- size, speed, aspect, type of ammo, etc. That's all manageable, and can be developed.

We're getting down into solutions to the problems I've been painting. Our surveys included queries to officers as to how it is that one assesses the worth of a tanker to the US Government. And I would call to your attention the unanimity of opinion that the ability of the tanker to contribute to his crew's performance on tank gunnery is

TABLE VIII DEFICIENCIES

- TARGET ACQUISITION
- UNEXPECTED TARGETS
- MULTIPLE TARGETS
- TARGET MOVEMENT
- RANGE TO TARGETS
- AMMUNITION LIMITATIONS
- LACK OF HOSTILE ENVIRONMENT

CONCLUSION:

A POOR MEASURE OF EFFECTIVENESS

OFFICER PERCEPTION OF THE USEFULNESS OF PROFICIENCY INDICATORS

TANK GUNNERY	70.8%
ORTT/ATT	31.9%
DAILY JOB PERFORMANCE	29.1%
PRELIM GUNNER'S EXAM	27.8%
CONDITION OF TANK	19.4%
ABILITY (?)	12.5%
TANK CREW PROFICIENCY COURSE	6.9%
MOS TEST	6.9%
SUPERVISOR EVALUATION	5.6%

widely considered to be the best indicator of his performance. Note also that the two measures of performance that are presently used by the personnel system to establish worth of a tank crew to the Army are universally disregarded; they're at the bottom of the list down here. This is the Enlisted Efficiency Report, and this the existing MOS test. It is for this reason, gentlemen, that we are moving to the Skill Qualification Test system this summer which will require, among other things, that the report that comes in in lieu of the old MOS test include a certification of the commander on the performance of his men. Here we are back to the tank crews, and I think you can see from what I've just said that I do not altogether agree with the way we've been doing it. As a matter of fact, I've got to tell you, that I've been part of the problem, since I sit on the general officers steering committee that steers the EPMS, and I earlier wedded myself to this career progression business. I was wrong, and we're going to try to redress that. Now what we've got here is the following kind of idiocy: we started out with a \$20,000 tank vehicle in WWII, and we came up with a system for raising or training tank crews to fit a \$20,000 vehicle. Thirty years later we're still raising and training the tank crews exactly the same way. In the meantime the vehicle has grown in cost to 1/2 million dollars, and tanks are on the horizon which will cost one million dollars. From the training and management point of view, what we have done here is taken expensive vehicles and manned them with a cheap crew. Compare this with aircraft, and presume that we have said that we will take the hanger sweeper and the wrench

