

RESUME OF SERVICE CAREER

OF

**THEODORE ANTONELLI, MAJOR GENERAL**

**DATE AND PLACE OF BIRTH:** 6 January 1920, New Haven , Connecticut

**YEARS OF ACTIVE SERVICE:** Over 37 years

**DATE OF RETIREMENT:** 30 September 1978

**MILITARY SCHOOLS ATTENDED:**

The Transportation School, Advanced Course  
The Command and General Staff College  
The Army War College  
The Industrial College of the Armed Forces

**EDUCATIONAL DEGREES**

University of Connecticut - BS Degree - Government and Economics  
George Washington University - MA Degree - International Affairs

**CHRONOLOGICAL RECORD OF DUTY ASSIGNMENTS (Last 10 Years)**

<b><u>FROM</u></b>	<b><u>TO</u></b>	<b><u>ASSIGNMENTS</u></b>
May 68	Jan 69	Vice Dir, Def Como Plng, DCA, USNO
Jan 69	Jun 69	Sp Asst for Post Hostilities Log Ops, AMC
Jun 69	Apr 71	Dir of Dist and Trans, HQs, AMC
Apr 71	Apr 72	DCSLOG, HQs, USARV
Jun 72	Jun 73	DCSLOG, HQs, AMC
Jun 73	Aug 75	ACSLOG, HQs, DA
Aug 75	Aug 78	Commandant, ICAF

**PROMOTIONS**

**DATES OF APPOINTMENT**

2LT

4 Jun 41

1LT	16 Jun 42
CPT	29 Nov 43
MAJ	16 Nov 50
LTC	13 Aug 56
COL	27 Jun 62
BG	18 Aug 67
MG	1 Jul 70

### **MEDALS AND AWARDS**

Distinguished Service Medal  
Silver Star w/Oak Leaf Cluster  
Legion of Merit w/2 Oak Leaf Clusters  
Bronze Star Medal  
Purple Heart  
Joint Service Commendation Medal  
Army Commendation Medal w/2 Oak Leaf Clusters  
Combat Infantryman Badge

**SOURCE OF COMMISSION:** ROTC (University of Connecticut)



### **INTERVIEW ABSTRACT**

#### Interview with **Major General (Ret) Theodore Antonelli**

Major General (Ret) Theodore Antonelli was interviewed by CPT Pelham Felder on 1 Feb 1985. MG Antonelli received his commission through ROTC and entered active service in 1941.

MG Antonelli was involved in the withdrawal of U.S. forces from Vietnam, and the retrograde of equipment from the area. He discussed in detail the reasons the U.S. had problems with its retrograde operation, from lack of concern for equipment condition to the increasing amount of retrograde versus a decreasing number of personnel available to handle the mission.

Corollary problems included classification of equipment for issue to the Vietnamese, for PDO action, or for retrograde to the U.S.; the amount of unidentifiable supplies in the area; and the need to re-evaluate our ability as a nation to meet our logistical needs in a "come as your are" war.

MG Antonelli closes with thoughts on the differences between combat soldiers/officers and combat service support personnel. He stressed the difference between leadership and management techniques, pointing out the need to retain leadership abilities rather than adopting the business-oriented style of managing people.

## INTERVIEW

-

-

The following interview occurred on 1 February 1985 at MG T. Antonelli's quarters in Alexandria, VA. The length of the interview was approximately 3 hours. The subject was the retrograde of material from a theater of operations. Historical analysis concerned the retrograde operations at the end of the Vietnam conflict.

**MG Antonelli:** I thought I might review retrograde operations at least as they were conducted in South Vietnam. Whether we'll ever need to experience retrograde operations such as those that were conducted in Vietnam, I don't know. There is another aspect of retrograde, and really that's what I would like to key on, that I think important. I was doing some work for some people recently, in terms of mobilization, production for mobilization, and in the text of sustainability of operating forces. This is what I read which I think applies and may point to the need to consider retrograde operations in the context of sustainability of our forces. The thought was at the current military thinking that says that new production of materiel in term of a mobilization is not likely. If we have to fight a war, it will be a "come-as-you-are war." A "come-as-you-are war" means that you've got to be ready. That's why one of the driving factors concerns readiness. We hear a good bit about readiness. That means readiness with what you have. You know, you've been in helicopter operations, and you know downtime because of maintenance is a critical factor. Readiness means that you have less meantime between failure; you have more of your equipment up and ready. In that context, the thought is that if we're not going to see equipment coming off of the production lines in the event of the kind of mobilization that they anticipate, which really is a "come-as-you-are war," it means that the overhaul, rebuild, repair, maintenance, maybe depot maintenance kinds of activities are going to be more important. Therefore, the retrograde of materiel that's down that has to be taken back to a depot maintenance activity is going to be a key to maintain a readiness and to increase sustainability. If this

is true, the re-supply of materiel is going to be heavily dependent upon a retrograde operation which takes the downed equipment (equipment that can't be fixed at the local unit or at an intermediate) so you don't get that sort of an equipment turnaround. If, for example, a tank is shot up badly but yet can be rebuilt, it may mean that you have to take that tank or that weapon system, get it back into a depot operation, get it rebuilt, and sent back. A part of that effort is getting it back - the retrograde operation. In that context, the retrograde then may be worthy of some consideration; what's involved, how do you do it, what are the lessons learned from the kinds of retrograde operations we've had. So again, what I wanted to say is that I'm not talking about retrograde in terms of the way it was used in Vietnam. In that context, let me give a little bit of background on what that was about. Were you in Vietnam?

**CPT Felder:** No, sir.

**MG Antonelli:** I'm just wondering what background you may have towards an understanding of what the situation was. When the so-called peace talks started, it was anticipated that there might be a cease fire. In any case, we recognized that we had millions and possibly billions of dollars worth of equipment in Vietnam which we might need to recover from the depletion of assets that had taken place to support the Vietnam effort. I think people will remember that in order to support the effort in Vietnam, we had new production to some extent, but we also had to withdraw assets from other areas including USAREUR (US Army Europe). What I'm trying to say is that a good bit of the equipment that we wanted was in Vietnam, and if the war was winding down, the thought was how to get it back into our depot system and have it available for redistribution. Another aspect, and also key to the retrograde operation, was the Vietnamization Program which was to provide materiel to the South Vietnamese. In both cases, retrograde operations were involved which meant the withdrawal of equipment from the using units by either putting them into some sort of repair/rebuild facility in country for reissue to the Vietnamese, or the preparation of that equipment for the overseas movement, and return to the United States. Obviously with respect to Vietnamization, which had the first priority in the classification of materiel, there were several factors that had to be considered. Among them was the equipment, the kind that was adaptable or could be used in the ARVN (Army Republic of Vietnam) in their tables of organizational equipment that was compatible with their requirements. Second, was the kind of materiel that they needed. Third, was the kind of materiel for which they had a capability to maintain. There was another effort, not a part of the retrograde effort, but part of the Vietnamization effort, to prepare them to handle/maintain the equipment that we were providing for them which had some degree of sophistication that was over and above what they (the Vietnamese) had been experiencing. That's a different story and we won't get into that. The John Murray article (MG John Murray, Logistics Magazine, Sep/Oct 84) deals with some of that, I think, and some of it is on target. I have a question about some of the rest, but that also doesn't matter. The point that I wanted to make is that the retrograde operation involved the withdrawal of equipment, classification, and some priority. By that I mean in terms of the condition of equipment, its need, and providing and turning it over to the South Vietnamese. I don't recall what proportion of our total inventory in country went to them. We may see it in some of the

slides that we'll be looking at, but I don't recall what. But I can tell you that there was a significant amount of equipment turned over to the South Vietnamese, and there was a significant amount of equipment returned to the United States. Let me get to the matter of the return of materiel to the United States. The classification codes that we used applied there also. In other words, there was equipment that was needed by the Army in the United States. What was the condition of the equipment? This was very important because if it was deemed to be not repairable, then the item would go to the disposal activities to be processed as junk. Another aspect is the item, even though it's not in a fairly reasonably usable condition, does it have component parts that might be used? Therefore, was it appropriate to break the equipment down into its component parts? One of the considerations is where do you do that? Would you do that in Vietnam, or would you do that in the United States? Another aspect that bears on the problem of the retrograde is that when the withdrawal started (this was during the Nixon Administration), there were targets that had to be met. The withdrawals were in terms both of equipment and materiel. You can see that as you get towards the end of the wind down, that you're going to find fewer and fewer United States units and organizations able to deal with whatever's left. It was a tricky thing to coordinate. I can remember General McCaffry who was the Deputy Commander, US Army, in Vietnam at the time worried a good bit about ... as we wound down that we had the proper proportion of some US combat capability to continue to provide security ... even though security now was shifting more and more...what was left in US capability, US forces ... was shifting more and more to the Vietnamese. Capability, and here the technical services became ever are important because as our combat operation wound down, our combat involvement wound down. The mission shifted more and more from a tech service point of view (from a logistical point of view) to supply of our own forces, sustaining our own forces, to that of supporting the retrograde operations and through the MACV organization, supporting the Vietnamization Program. I can recall General McCaffry wondering at what point of withdrawal that causes the castle to come tumbling down, or the other way around, to put that straw on the camel's back that causes the whole thing to cave in. In terms of withdrawal as we were getting down, we began to look at the kind of unit that really, you would want, what should be the last to go. Would it be an ordnance repair kind of thing, would it be a transportation unit, or what? So as I say, it was a very tricky, complicated process to try to maintain a capability to accomplish what we wanted. One of the spinoffs, and I think that this is important and doesn't necessarily apply to retrograde, but applies to a whole bunch of other things, and that is contracting out. Now I'm not going to take a position as whether I favor contracting out or not, but what I do want to point out is that in Vietnam even when we were at peak strength, we had a good bit of contracting out for a variety of operations; power generation, depot maintenance, field depots, transportation units, and so on. As we wound down, we began to rely more and more on contracting out to accomplish some of the key functions such as transportation involved in the retrograde operation that would draw the equipment down to the depots that were remaining to process equipment. We even contracted out a depot maintenance facility for the repair/rebuild of a variety of equipment. While I'm saying this, I want to make clear that this contracting out did not pertain to logistical support for the Vietnam forces, the ARVN. They had or were developing their own capability to widen logistical support for their own forces. I'm

talking about logistical support for the US forces that were remaining. So I'm suggesting that what the contracting out operation accomplished during the latter days of the winding down period is a subject that ought to be analyzed if it hasn't already been in terms of operations in outer country areas, overseas areas. What was the value, what were the lessons to be learned, and so forth?

**CPT Felder:** May I just ask you a question to kind of clarify, particularly since I'm not that familiar with contracting out? You were saying contracting out was to non-military type organizations or were you saying ...

**MG Antonelli:** No. Contracting out, for example, as we withdrew US troop capability (transportation units), we in some cases replaced that capability with a contract capability, a contractor. The equipment that he obtained provided the transportation service.

**CPT Felder:** So they weren't military that could have been... it was a civilian organization?

**MG Antonelli:** Yes, civilian. In some cases, they would use indigenous people; in some cases, they would use third country people. There were a lot of Koreans, as I recall, involved in these kinds of operations. With respect to the maintenance facilities, these were civilians located at Long Binh at a facility that had been occupied by a US Army Ordnance Maintenance unit. A civilian contractor took it over. A civilian work force made up of, in some cases, US personnel, indigenous personnel and third country personnel, who provided a level of repair of US military equipment which was returned to our forces remaining in country. For example, in the Saigon area towards the latter stages of the draw down, there was a brigade of, I think it was the 1st Cav, that was left. Just a brigade. For those forces, they would provide that kind of logistic support; we had withdrawn or we were in the process of withdrawing our Ordnance units. Just back to that point that General McCaffry was only concerned about; would we maintain a sufficient capability to accomplish our job. One of the problems, and I'm getting off track just a little bit, but just to recall the problems where you're trying to maintain a balance which permits you to maintain a capability to sustain your own force. In the transportation area, many of our port units had been withdrawn to the point where we were now highly dependent upon a cadre of US personnel to supervise and so forth, but dependent upon local longshoremen, and then a strike situation developed. For some period of time we couldn't move anything out of Newport because of the strike. The worry there was well, ought we to take some other kinds of remaining US units to insert them into this situation, or to keep the operation going because we still were requiring some materiel to come in - food, for example, and so on, and we were trying to maintain a retrograde operation. That points at this matter of the balance.

**CPT Felder:** What forced us, the US Government, to contract in the first place? Why couldn't we have used military units to do that job?

**MG Antonelli:** Limits to military strength. I would say even during the peak period of US military involvement, there was a ceiling on the number of US troops in Vietnam. If there were additional things to do, contracting out; in the wind down this became even more important because there were targets, there were ceilings whereby a particular date there would be no more than X number of US military forces in country. A month later, there would be a lesser number. Each month there was a step down and those targets had to be met. They were set by the President and they had to be met in this withdrawal process. To take up the slack for whatever it was that remained to be done (essentially it was the retrograde operation that was occupying our time at the time), we contracted out. Going back to our depots in the United States, I've mentioned the classification aspect in which you classify equipment in terms of its need, its condition and what might need to be done. Incidentally, another part of it is the management information system which you need to keep inventory information, transportation information, and so on, so you can keep track of these assets through the system, was just a reverse of when you supplying sustaining forces. Another of the keys to the retrograde operation was to see to it that an item of equipment that was in a reasonable condition of repair didn't further deteriorate in the retrograde process. This is where we had, I believe, a considerable problem. I think it relates then to any retrograde operation we would have in the future, especially even if it might be for a short distance, that is from a combat division, a unit in line, to some depot repair facility in the theater, corps, or whichever area of operation. The preservation of that equipment becomes very, very important. Among the things that needed to be done with equipment after it was classified was to prepare it for shipment. Preparation involved the cleaning, the application of preservatives, and if necessary, the blocking and bracing and so forth, so that it could make the trip in reasonably good condition. My feeling is that a good bit of it was done well, but a good bit of it was done very poorly. What resulted, and it is very difficult to point the finger at where the problem might be, but there's case after case of equipment arriving back in the United States (some of it was going to Hawaii, both places) in horrible condition. In other words, it started out with a classification code that said that a certain kind of repair, maybe a minimum of repair, and by the time it got back, it needed overhaul or rebuild. An important point is in the care, the cleaning, the preservation, and the handling. I think if what I read is that in a "come-as-you-are war", and the readiness is based upon what you have, therefore, there will be a considerable dependence on retrograde operations to maintain the sustainability. I think that some study in the retrograde operations and the lessons learned is very important. I told you over the phone, when we chatted, that our experience was different from the Aussie (Australian) experience. Some of this has to do with motivation of people. The Australians who had been involved in Vietnam and were withdrawing, needed the materiel that they had used in Vietnam. They needed it back home. I take it for them there was no new production. They were going to have to live with the equipment that they were taking back. The big difference between the way they did it and the way we did it, is that for them the unit that used the equipment was the unit that was going to receive that equipment back in Australia. They had responsibility for the preparation, the cleaning, the preservation, the packing, the handling, and getting it on the ships; that unit had responsibility back home. It makes a very big difference if it's your tank, if you are the tank commander, and this is the tank that you are going to be using back in some

situation, you'd probably take a lot more care about that piece of equipment because that's the equipment that you're going to be using someplace else. It makes all the difference in the world. Whereas in our case, the equipment lost identification with respect to a unit; it would go back into a common pool. What might be reissued to some unit back home might be quite different from what it was that they had put aboard the ship. As a matter of fact, they didn't put it aboard the ship; some other people, intermediaries, if you will. We work very hard to try to motivate people to do right by the equipment because of its value, and so on, but somewhere that broke down in many instances; that is the difference. For future retrograde operations, especially those that are out of the point where the unit that loses the piece of equipment...by losing I mean it's withdrawn from him, it's been in a combat operation or whatever, it breaks down and it needs a level of maintenance that's beyond their capability, and therefore, has to be retrograded. If somehow that same piece of equipment was the one they'd get back, I think that there might very well be a motivation on the part of those individuals to be sure that it gets back in reasonably good shape and doesn't deteriorate in the process.

**CPT Felder:** Let me ask you a question about that subject. I think it's particularly important. The concept of ownership has been around our Army for some time; it's not a new concept. What prevented us from doing that in Vietnam, and having that unit literally go to dock side and do the preparation of that vehicle or whatever the piece of equipment was, and then receiving it on the other end?

**MG Antonelli:** I think a couple of things. One, the size of the retrograde operation. It really became a considerable operation ... huge. Second, the draw down. You had to get our people, our military forces, down to the level. For example, when the 1st Division deployed to Vietnam in 1965, they took care to put their equipment, prepare their equipment for overseas movement, because in this instance, they probably were going to receive that equipment and use that equipment...a lot of care. I don't know whether the same thing happened in reverse. In other words, when the 1st Division re-deployed from Vietnam, whether they were the ones to take that equipment and put it aboard and so on. I don't know about that; they might have. The latter units, a very different situation occurred because of the fairly rapid draw down, and plus the requirement for sustaining Vietnamization. If there was a requirement in country for materiel, that materiel then would go to them. If there was a need for some withdrawal, cross exchange if I could put it in those terms, a remaining US unit needed some equipment. Let's say that an outfit needed a 155mm gun for one reason or another, rather than order it from the United States to come on in, you would draw down your depot stocks. If the depot stocks had been drawn down, you might do some cross leveling. You might take it from a unit that was going to re-deploy and so that piece of equipment then makes sense. It was a long pipeline from the United States to Vietnam. So there are a whole number of forces that came to bear, and towards the end made it unlikely that a withdrawing unit would put its equipment aboard and then receive at home station back in the United States.

**CPT Felder:** Apparently that was a major problem during that period.

**MG Antonelli:** Now if you'd like, why don't I turn on the projector and let's see what's on... I don't know if you want to keep the tape recorder going.

<Slide Presentation - viewed by MG Antonelli and CPT Felder not on file>

**MG Antonelli:** I think you had already noted these are called Keystone operations. This depicts the equipment pipeline from the Keystone unit or the Non-Keystone unit through the pipeline and through the retrograde operation to the vessel that is taken back to the United States. This slide depicts a vehicle undergoing inspection at classification, and cleaning preparatory to putting it aboard a vessel.

**CPT Felder:** Let me ask you a question. I noted just briefly looking at that manual over there, the After Action Report, it talked about the problem of supplying blasters (vehicle cleaning water blasters) plus that apparently we washed a lot of vehicles with salt water rather than fresh water. Was that a major problem over there?

**MG Antonelli:** Well, the availability of the blasters, was a major problem in that initially, their availability ... we had to get them ... to acquire them in sufficient numbers to use. The second part of the problem was that there were a lot of breakdowns with these blasters...they're water blasters. The breakdowns could have been for a variety of reasons; rough handling conditions and whatever it might be, or maybe a flaw in the equipment itself. It wasn't equipment that had much time to test. It wasn't an Army item of development; it was a commercial item. When they worked, they worked quite well, but there were frequent breakdowns. So, two problems. One, the initial availability, and second, breakdown which meant that you needed to get some more. Where they came from some place back in the United States, and you had to get additional suppliers, and there was a time lag, and meanwhile the pressure of time to withdraw. In respect to the water that was used, you were supposed to use fresh water. In some cases I expect they were putting the units in what they might called brackish water -- that was a matter of supervision. If that happened, obviously there'd be some deterioration that could take place but they were supposed to use fresh water. In this slide they're preparing small arms for return, they're classifying them, looking at them to see their condition, and putting preservatives on them for onward shipment. This is a generator. I have a hunch that this generator provided power for a variety of activities in the retrograde operation. Those are the blasters that we were talking about. You see, it's a high powered stream of water. You might say, well why? That looks to me like the place - the depot up in Da Nang. The materiel being brought to the depot often times was dragged through. It wasn't all surface roads or hardstands; they came through the field and they'd come clogged with mud, dried clay, and a variety of debris on them so they had to be ... these water blasters were the most effective tool to clean. That's a truck chassis. That's an armored personnel carrier that's being cleaned. You can imagine that track is being brought in whether under its own power or whether it is being towed, accumulated a good bit of mud, and so on, on the tracks in the process of being cleaned. Among the things that had to be done, incidentally, you would see that ramp ... ramps had to be built to accommodate a variety of equipment. Another example of water blasting operation. I'm not quite sure what that item of equipment is. Can you make it out?

**CPT Felder:** A M578 recovery vehicle.

**MG Antonelli:** Yes, I think it is. You can see in that trailer on the back, a variety of equipment that evidently has already been packed and labeled and so on and is going to continue to the loading platform. That's an example of component parts that had been cleaned and prepared and are now ready to go to the dock for loading aboard ship. There is a good bit of artillery. Same procedure involved. When you try to put something like that...move it and put it aboard ship, there are a number of parts that can get hit, damaged and so on. The fire control mechanism often times is the thing that can get damaged. Extra care could be taken to prepare, preserve, pack, and so on. That shows the loading of some boxes, small items of equipment, aboard a sealand van. That's just a matter of labeling. Remember, inventory control and the information system that identifies equipment and maintains that identity through the system, is very important. In this case this box obviously is going to Taiwan. We had rebuild/repair facilities in Taiwan, and in some cases what was done was two things. One, it might have been going to Taiwan for rebuild and return to Vietnam for the Vietnamization Program, or it might have been going to Taiwan for rebuild and then sent back to its owners. Here is an idea of the quantity of equipment that was deemed prepared for retrograde. You look at that and that's in pretty good shape. I wish I had some pictures of that same equipment on arrival in CONUS. It looked pretty good at that point and you can see it's right on the dock ready to be loaded aboard ship. The damage might have occurred in the loading process, and the step after this one, might have occurred in the unloading process.

**CPT Felder:** Sir, I read one question about the Da Nang Base... there was one report cited (this was in 1972) in which they were moving vehicles and in some cases, while moving vehicles with forklifts by lifting them and damaging the undersides and dragging the vehicles around the yards, in some cases, that didn't even have wheels on them.

**MG Antonelli:** First of all, the real world is that a lot of them were in that condition. In other words, they didn't have wheels and you had to move them from point A to point B. They used a variety of means to move them. In the process of moving, damage would occur. The principal thing ... two things...motivation that I talked about before. Motivation of the operator to a soldier who is handling that equipment. His training and his motivation, especially his motivation is so important. The second thing is that when an item of equipment is airmobile, it is much more difficult to handle. Supervision becomes extremely important. Motivation on the part of the individual soldier who's handling the equipment process, he's the forklift operator and so on. In supervision, the sergeants and lieutenants and so on, and inspection and checking is extremely important to see that it's done right. If you don't and you sit back in an office someplace, it's Murphy's Law that will operate. You can see that forklift operators becoming somewhat like cowboys handling their equipment, moving it very rapidly, tilting it, and then having it fall. Then damage has already occurred. Picking it up and putting it aboard, now it's damaged. Motivation, supervision, in the real world is that you're going to find this sort of thing. The ideal situation is an item of equipment that can move under its own power; be maintained, that that capability be maintained. If it sits in a lot for some time, you

may find that the battery's gone dead or a variety of things happen and somebody with quick judgment will say let's just push it. Now the process of further deterioration occurs. Compound that with the huge mounds of equipment that materialized and the pressure to meet target goals meant that without proper supervision some would get damaged.

**CPT Felder:** Did we have a problem too, that we kind of were forced into a situation to water the system and accept equipment that had much of the organizational maintenance not performed on it?

**MG Antonelli:** That's a real possibility. That happens frequently, not just in a retrograde operation. Again, it's a matter of whether the unit is going to receive that piece of equipment back. People take more pride (this goes back to that Australian) in equipment that is theirs to use. If it's going someplace else, they lose that motivation. That doesn't mean that the only solution is to be sure that the equipment always goes back to the unit that turned it in, because in some cases, there were a variety of reasons why this can't happen. For example, cross leveling. Maybe the unit is being moved to another area of operation, whatever it may be, and therefore, you can't expect to be receiving that item of equipment. Therefore, the solution has to be found in the areas of motivation and supervision to see that the job is done properly. With people too, I don't know whether you've had any of this experience, but in World War II, we had a lot of what we called cadre operations. When it came time for my 16th Infantry where needed to provide people for units that were being organized, mobilized, and formed, you can bet each company commander or battalion commander or regimental commander, as the case may be, as he identified the people that he was going to let go, he let go those in his opinion that he least wanted retained. I think the same thing with equipment is true with people. If you've got five radios and you're going to have to turn in one of them, you'd probably are not going to turn in your best radio or even the next best. The probability is that you're going to turn in the one that maybe needs some repair. So, that matter of motivation. This is a sealand vessel. Containerization was very much a part of our activity, and quite useful. I believe that you'll find that the materiel that arrived in containers probably was in better condition than equipment that was not loaded that way. You'd recognize that animal helicopter. Now that's a critical piece of equipment, obviously high dollar value, and had to be handled... now this is going into a C141, I believe, I'm not quite sure what that's going into to. Could be going into C140.

**CPT Felder:** C5, I think, sir.

**MG Antonelli:** C5?

**CPT Felder:** Yes, judging by the upper deck.

**MG Antonelli:** Obviously, greater care was given to high dollar equipment than otherwise would be the case. These sorts of things got more visibility throughout the pipeline and probably arrived in much better shape than your tanks or APCs (armored personnel carriers) and so on. There is a MILVAN being loaded aboard a ship. This just depicts a ship standing off in a harbor. Let's see if we can read these numbers. It might

give us some idea of the quantity...short tons in thousands...situation as of 1 May 72, 1,679,000 tons had been moved. We'll try to recheck that number to give you an idea of the tonnage that was moved out of country as of the 1st of May 72.

**CPT Felder:** It looks like it went from 262 in FY 69 to 1,751 in FY 72.

**MG Antonelli:** Yes, short tons in thousands.

**CPT Felder:** Good golly, that's an increase of five or six hundred percent.

**MG Antonelli:** Yes, and the thing that you want to recognize as you look at this accumulative line, at the same time the draw down was going the other way. At about this point, you were having fewer and fewer troops left to do an ever bigger job. That's a breakdown by kinds of cargo. That's total tonnage remaining. Incidentally, that label on that is total tonnage pile in short tons and it's 41,500 short tons of general cargo; 49,200 short tons of Class VII; 1,900 short tons of ammunition; and 42,200 short tons of GOCO (government-owned, contractor-operated) or PDO materiel for a total of 134,800 short tons remaining as of 1 May 1972. Just a little aside on this matter of the remaining tonnage stock pile, and I can sympathize somewhat with respect to the matter of counting the enemy. These are estimates, and my God every so often you'd think that you'd gotten the pile down to say 134,800, and then somebody would discover another 50,000 tons someplace and it would drive you up the wall.

**CPT Felder:** Let me ask you a question about that subject right there. There was a remark in one of the senior officer's debriefing reports about the attitude in Vietnam of having all you wanted to have and then some rather than being lean and mean like we're supposed to be in a military organization. Apparently, that had an impact on the retrograde operation. Did we really not have an idea of what we had in Vietnam because of the sheer amount of equipment?

**MG Antonelli:** Well, we had an idea. I think we're talking about two things. One, this matter of the amount of equipment that we had and was it all needed which is one thing. Then, the matter of how much did we have. Dealing with inventory management. Inventory management even now continues to be a difficult job. Maintaining an accurate inventory of what you have continues to be a considerable problem even in peacetime, even in a CONUS depot, and it's a continuing problem, and we still in my opinion don't have it completely solved. Compound the operation in an overseas area with facilities that are not as sophisticated as those in the United States where you have an annual...troops that go in for a tour of duty, an annual increment ... and so you have considerable turnover in personnel. In some cases, you civilianize the operation, bring in indigenous people to assist as a learning curve and even for the new troops for a learning curve. Yes, we had a lot of problem with respect to maintaining accurate inventories, and a fall out of that is not only because your inventory is not accurate, the requisitioning of materiel for re-supply gets distorted. If you were to talk about the gray box (MILVANS) situation. For example, at Long Binh depot you could go out at any time and see these so-called gray boxes. As they deteriorated over time, the markings

became indistinct, the inventory became older and less reliable. Then you'd go through a process of opening up that gray box, identifying the materiel in it, putting it back into your inventory, cross-checking to see whether you really had lost it in inventory. In some cases, some double counting might result. And it's reported (reputed) that sometimes that new box repacked so that it could be retained, that new box becomes another gray box. Some of the reports are that some of those gray boxes perhaps have had three repackaging during their lifetime and never got used ... got lost in inventory. Meanwhile the operation has got to be sustained. That's one part of the problem, this matter of inventory control, maintaining accurate information about what you have, and therefore, requisitioning only what you really need to sustain operations. Another part of it, you usually have to have a pile of reserve ... a stock pile of some kind to sustain operations because your pipeline isn't necessarily going to run that smooth. Among the things that we try to do to reduce the pipeline ... reduce the amount of materiel in storage, which is another topic all together in the direct supply support system, is to improve the flow of materiel so that you have less need for stock pile of materiel on the ground which is likely to get lost in the inventory accounts and so on and so that you reduce that amount in leaner situations. I think the second part that you were alluding to was the charge that we were supplying too much to our forces and that's another matter. There are several ways to look at it and we're off the subject of retrograde a little bit, but just a couple of points. In the early stages of Vietnam, we had what was known as the "Push Operation"..."Push". In other words, the important thing was to get the materiel to the people who were doing the fighting over there so they could use it. The concentration was on pushing, if you will. In the process of pushing a couple of things happened. One, there would be a pile up of materiel. Second, not everything is consumed at the rate you thought it would be consumed so you get this dis-equilibrium. You may have too much of one kind of item and not enough of another item. In the "Push" packages that were going they might still be pushing out what they thought a balanced load, but what was happening was that the pile of the items that you weren't consuming as fast as you thought you would kept increasing while you were trying to provide materiel that was being consumed and was being needed. Until that situation got corrected, which was some time after the initiation of hostilities in Vietnam, in some cases, it was too late and that's one of the things that contributed to the so-called gray boxes. Another element is, did we need all of the stuff that was sent? Now we're getting into another area and I have got some personal opinions. The personal opinions have to do with the fact that we didn't mobilize the country politically to sustain the fight in Vietnam. It seems to me that possibly as a matter of political conscience whatever the troops over there needed we were going to provide to them. You could understand that you have a situation in which some people have to go and some people don't. Your conscience says, well as a sacrifice, possibly sacrifice is not the right word, but to help compensate for this what I call this distortion that was taking place in our society that not everybody goes. There are good reasons why some people, or supposedly good reasons why some people, don't have to serve, don't have to participate, that the rest of the population is not put on rationing, doesn't feel the affects of having to go to Vietnam, and be dislocated from family and so on. This matter of conscience results in whatever they need they're going to get. Out of that maybe came the multitude of soft drinks, beer, and creature comforts. It's quite possible. Gee, I saw...my service in Vietnam is broken into two parts. The first

time I went to Vietnam was not for a tour as such but periods of temporary duty in connection with a sensor system that we were putting into Vietnam. The second time was for a full tour. There is no question that I could see that the longer we stayed there, the more creature comforts we saw to include office furniture of the kind that you see here in the United States, not the portable table that I saw in World War II. If you had any furniture in a headquarters that was of some consequence, it was something that was found locally, either requisitioned, or if you occupied a school house or whatever it was for your headquarters or your unit, you used the furniture that was there. I don't think we were shipping over general officer furniture, for example if I could call it that, air conditioning equipment back then. A lot of creature comforts were provided which I think added to the strain of the supply system itself. Is that what you were talking about?

**CPT Felder:** Yes, sir, to an extent.

**MG Antonelli:** This slide just shows a number of the Keystone increments, the number of troops involved in those increments, and the number of items pertaining to those Keystone units. I don't recall which units were involved. As you can see, the Keystone Eagle is one of them, 15,400 troops and 28,500 items were re-deployed. Next element, was Keystone Cardinal, 14,082 troops and 26,455 items and so on. There was some pretty good size movements, for example, Keystone Robin Charlie involved 41,000 troops and 96,056 items of equipment that was moved. Keystone Owl, 55,235 troops and 110,000 items of equipment (that's an estimate). That's an indication of one of the Keystone units, Keystone Mallard, 1 Dec 71 to 31 Jan 72, involved the 101st Airborne Division, 1st and 3rd Brigades of the 101st Airborne Division, 7 engineer battalions, 16 engineer companies, 3 aviation battalions and 14 aviation companies for a total of 36,718 Army troops, 72,000 PIMA items (principal items), 170,000 secondary and post camp station items. So, it gives you an idea of the magnitude of that particular deployment.

That shows another depiction of the retrograde pipeline which involves the identification of items, the processing, the offering of the equipment to the depots for onward movement, and then the staging, and ultimately the shipping of equipment. This talks about the unit responsibilities. You were talking earlier about... you asked the question about what was the using unit supposed to do? Well, for example, the units of the 101st Airborne Division were turning in equipment. Their responsibilities were to prepare the inventory to move the equipment to a central staging area, and to process the equipment for onward movement.

**CPT Felder:** The reason I asked was because it was during Keystone Mallard that was one of the larger Keystone movements, the depot at Da Nang was (and the resort doesn't elaborate) was forced into the situation where they took equipment with a no-questions-asked policy.

**MG Antonelli:** Yes, because of the hastening of the draw down date. Let me go back to the way it was supposed to be. The way it was supposed to happen, again the unit responsibility to prepare the inventory, move the equipment, process the equipment.

The Support Command responsibility, for example, to support the command at Da Nang, they provided technical assistance in maintenance classification in the cleaning, preservation, packaging, packing and the disposition instructions. Let me go back just a little bit. That was the way it was intended to be done, but when the draw down was accelerated, then the Support Command took on many of the responsibilities that had been the unit's responsibilities. See, supposedly this Support Command could say to a unit you have not prepared this properly, or this inventory is not complete, and you have to take it back, or do it over again, or do it until it's correct. The Support Command provided the technical assistance in that classification and so on. But as the draw down accelerated, then the Support Command had to take on many of the responsibilities that had been the unit's responsibilities. This map identifies the location of the US Army Vietnam retrograde operation. You can see that we had one up at Da Nang, we had one at Que Nahn, we had one at Cam Rahn Bay, we had one in the Saigon area down in Vung Tau and you could see that for aviation processing which was very important because of the high dollar value that the fewer those items and so on and that it required special processing. We had three of them; one up in Da Nang, one at Long Binh, and one down at Dom Tang I guess it was, and one down at Vung Tau. These were the classifications that we had. You could see Classification I was one that required no maintenance, only organizational maintenance. Code II was one that required DS/GS level maintenance. Code III required depot level maintenance. Code IV was uneconomically repairable. So that classification permitted you to take that stuff that was Code IV and put it into PDO yards, which is another problem incidentally, but we won't get into that. Part of the problem though happens that something would start out as a SCRAM I requiring no maintenance, or only organizational maintenance, and by the time it got through the pipeline, it wound up as SCRAM IV, uneconomically repairable or required depot level maintenance. This kind of a classification permitted us to move the materiel to an appropriate place, required no maintenance, only organizational maintenance. For example in some cases, it was to go over to Hawaii, I think the 24th Division was there, they had to receive the equipment that they needed. DS/GS level maintenance meant that it could go into a CONUS depot when it needed to be almost immediately available for redistribution or it could be earmarked for a particular unit. Both SCRAM I and SCRAM II were the kinds of item that you'd look for the Vietnamization to support the South Vietnamese. Items that required depot level maintenance obviously would go back to our CONUS depots, or in some cases, to Taiwan for that kind of work. This is an interesting slide. It shows you a breakdown of disposition of Keystone assets prepared 1 May 71 - 30 Apr 72, a total of 315,973 items. Of those, 77% of them were retrograded; 12% were sent to the ARVN, the Vietnamese Armed Forces; 7% were retained in country for our own requirements; and 4% went to PDO. That's an interesting breakout. You can see that the 77% that was retrograded of those 315,973 items, 244,424 were sent back to CONUS; 36,959 went to the ARVN.

**CPT Felder:** Do you know if that PDO figure refers to PDO items there in Vietnam or was that total PDO items?

**MG Antonelli:** It was the disposition of the materiel that was being processed, for example like the 101st Airborne Division and other US Army units, those assets that

we're talking about. Of the 315,973 PIMA items (principal items), 4% of those items that they turned in, 101st Airborne, the Aviation.... 4% of them wound up in the PDO yard. Whether that number is good enough... you always say gee, it should have been less than 4% because these were in the hands of units that up to the time they started the retrograde, had been stationed in Vietnam and supposedly operating with that equipment. So, maybe that figure was too high, that PDO figure was too high. And that's the end of that. Well, have we run retrograde into the ground? Let me sum up the matter of why you pursue this because I don't know whether we'll ever have an operation of the kind, where we're going to withdraw considerable amounts of equipment from a theater of operation. I think the usefulness of a re-examination of retrograde operation lies in the probability that if we ever are engaged in combat again, and if it's a "come-as-you-are" kind of situation heavily dependent on the readiness that we have to fight with what we have, it means that sustainability is going to be dependent upon the maintenance of that equipment that we have in that "come-as-you-are war," and that maintenance may very well include retrograde operations to take items that are down for whatever reason, either out of combat action or normal wear and tear, if I can put it in that category, and get that item back into operation in as a short of period of time as possible. If you can't fix it in place, it may very well involve returning it to some point where it can be processed/repared, whatever, and put back into action. That process of withdrawing it, moving it and some of the lessons that we learned in Vietnam in this kind of an operation may be appropriate. In my opinion, the matter of motivation and supervision is terribly important in a retrograde operation. In a combat environment, items that are out of action, a couple of things can happen. If you don't watch out they'll start to be cannibalized. In some cases, cannibalization is what you want to do, but that requires very, very close control on the part of the decision makers that that's what you're going to do with that particular item of equipment. You're going to take parts out of that and components out of that to use as something else. That requires very, very careful consideration on the part of the decision makers. It may be then that what you're going to do with that item more likely is to withdraw. If you're not careful about taking care of that particular item, it will deteriorate and then it becomes just a hulk and not usable for anything but either the PDO yard or just to rust in place. We're going to be dependent are on fighting with what we have and not materiel coming from new production. We may have to focus a good bit of attention on retrograde operations, and transportation is very much involved in retrograde operations because often times it's in the movement of materiel that it gets damaged, gets lost in inventory and so on. End of subject.

**CPT Felder:** OK, good.

**MG Antonelli:** First of all, my background - where do I come from. I was an infantry man in combat in World War II, 16th Infantry, and for the earliest part of my career, I was in the Infantry. I went into the Transportation Corps in the Integration Program. My commission came from ROTC Program in the Infantry, and I joined the 1st Division at Fort Devens and deployed with them and fought with them in the early part of the combat activities. After I was wounded, I remained in the Infantry and went through a variety of other kinds of activities; personnel, a whole bunch of things. In the Integration Program, I was accepted by the Infantry and the Transportation Corps. The reason I got

into Transportation Corps was because a fellow that I had worked for in 6th Corps in North Africa and later in Italy, had transferred to the Transportation Corps. That's how I got there. At any rate, the point that I'm really trying to make is that my origins were Infantry and I have very deep respect for the Infantry. As a matter of fact back at that time, I couldn't stand logisticians. I didn't have a good appreciation for it and all of a sudden, there I am. The first point that I wanted to make is that you could be terribly parochial and I think that you young officers need to know the importance of the interrelationships. You need to know the combat mission and you need to know the relationship of Combat Support and Combat Service Support. Really that's the point that I want to address. I came from a Combat Infantry background and never lost that love of the Infantry and the respect that I have for their operations. I think that over time-- I also grew to understand the importance of all the supporting aspects. The concern that I have is that at times this parochialness, if I could call it that, can be found in whichever arm or service people are in. Incidentally, it goes beyond that and has to do in terms of the branch of service, whether you're Army, Navy, Marine Corps or Air Force. I've had a good bit of purple suit activities and I think that that's important also. Let me get back to the Army mission and the importance of understanding the interrelationships between Combat Support and Combat Service Support. Unfortunately at times people without background of why it is that we even have armed forces meaning that the reason for armed forces is to deter war, but failing to deter it, to fight and to win, and therefore, the cutting edge is the combat operation. If we don't understand that and sometimes in terms of building up our own esprit and moral or whatever it might be in whatever we're doing, we may lose sight of the reason why we exist if you're in the Combat Support or the Combat Service Support element. Oftentimes people want to do things in a business-like way. I have a problem with that if what they mean in a business-like way and that is the way we would do things in the private sector, in a commercial operation. I can see in a commercial operation in the private sector that if you're involved in a trucking operation that the end all, the bottom line of that operation is the profit that the outfit makes and the capability that outfit has to do whatever it has to do. You do not relate necessarily to the reason you're given the good quest to move items from point A to point B. The begin all, and the end all, is in that transportation operation. This applies if you are in the food service sort of thing. It may be that if you're in retail food operations, that's the beginning and the end of everything that you're involved in and that outfit does well by whatever measures are provided and usually their dollar, that's success! In a military force, you don't have in my opinion, an ordnance activity, or an engineering activity, or a transportation activity and you name it other than it's there to support the combat arm. Therefore, I feel it's important without degrading or depreciating the value of the Combat Support or the Combat Service Support is that they always maintain their focus of why they exist. They exist in order to be a part of that combined operation, that is if it's going to be successful, means that you've deterred or if you have to fight, that you win. It's that combat outfit that ultimately is the victor or provides that victory with that backup support. How do you translate that into activities that will be meaningful, how do you provide motivation to your people if by what you say tends to give the afterthought that what they're doing is not as important as the combat operation. That's a tough challenge I think for a leader. He's got to accomplish that. He's got to keep his eye on the why they are providing that logistic

support and that success is measured by the degree to which they increase the effectiveness of that combat force. I think the term that's used today which I think is a damn good one is "combat multiplier". If through what your unit, your logistic support unit can do, increases the combat effectiveness, increases that combat multiplier, or provides that combat multiplier that increases the combat effectiveness, you've done your job. If under the deterrent part of it, the whatever is looking at what we can do believes that if there is creditability to our capability and if on the Combat Service Support side or Combat Support side, you've contributed to that creditability, you've done your job. Does that make any sense to you or do you have any problem with that?

**CPT Felder:** No, it does. I'm curious if because you think a subject is important that you think that there's a problem or has been a continuing problem in Combat Support/Combat Service Support units with attitude towards the combat arms.

**MG Antonelli:** Yes, this is again my opinion. I have a concern that we put too much stress on what to call management. That we equate management and leadership; we say it's the same thing. I've had discussions with others and they'll tell you they disagree with me. I think one can get too much into the mode ... into the philosophy of management that is what you do in the business world. Let me back up just a little bit. You don't find in the business world really any activity such as artillery, infantry, or armor, but you do find in the business world such activities such as transportation, repair, maintenance, communications, you name it, you can. There are careers in the private sector in these areas, communications, transportation, repair in the variety of repair and maintenance, and the variety of activities. I believe too that there is much that can be learned from the management techniques that are used in the private sector. I think that we can become so wrapped up over time in the philosophy of management, borrowing from the private sector using their management techniques, and so on, which is all right as long as we don't lose sight of what I would call combat effectiveness and combat capability. In combat effectiveness and combat capability, I think there are many techniques of management that apply, but I think that leadership frequently is something in addition to management. I think of leadership as a 24-hour responsibility. I think management can think in term of conservation of resources that maybe conserved by reducing the amount of time that you spend on a project. Maybe, there is no distinct relationship between the two analogies, but a manager may be thinking in terms of rather than to put 8 hours into this operation, he may think can I do this, or can I cut the cost if I can do this thing in 6 hours or do it with fewer people and so on. Yes, I think you need to think about some of those things in a military operation. But in a military operation, you have to win and it maybe that you have to put that additional hour or those additional resources in order to accomplish the task. You may have to employ your reserves in order to win. In leadership, I think we have to think about the people side of things. A manager thinks of all his resources and he thinks of financial resources, he thinks of capital resources, by that I mean plant and equipment, facilities and so on, he thinks of his human resources, we used to call them labor resources, and so on. I think a leader looks a little bit more to a human part of it, the soldier, the sailor, the airman, and his capabilities and to motivate them and so on. There are some subtleties involved. Let me get back to the point that really I'm trying to make, and that is

that, the Combat Support/Combat Service Support are extremely important but the recognition is that they are not an end in themselves. That their reason for being is to contribute to the combat effort and to the extent that they do so and become a combat multiplier and increase combat effectiveness, they're doing their job. In those terms, it's not quite like the commercial or the private sector counterpart of these activities.

**CPT Felder:** I'm curious if we're talking about developing officers, I guess, in this particular case and developing that attitude within Combat Service Support units, if you have any thoughts on how we accomplish that.

**MG Antonelli:** I was thinking of more than just the officers. I'm thinking of the officers and the men, especially a non-commissioned officer, and the man. I think it's across the board. Let me give you a for instance. I mentioned earlier that one of the responsibilities I had and it was a great tour of duty for me was to command a transportation battalion in the 1st Cavalry Division in Korea in 1959 and 1960. As I mentioned at lunch, the 1st Cav back in those days was quite different from the 1st Cav that you have now. We had very little division aviation. The aviation we had was used primarily for command and control and communications and reconnaissance. We had the OH-13, I think it was the L-19, not very much aviation. Back then also, I think we were in the pentomic mode, the division was; we had battle groups. The battle groups replaced the regiments that we used to have; now you have brigades. We had five battle groups. The environment was a good environment, and in my opinion for this kind of assignment because we were within the 1st US Corps in Korea. We were two divisions, the 7th Division and the 1st Cavalry Division. We both had combat missions which were to...remember it was only an armistice. We have never had a piece in Korea; it was an armistice, and therefore, we had a sector to defend and that's where we were. Back at that time, the armored personnel carriers were not organic to the Infantry battle groups. One of the unique responsibilities I had pertained to three companies of armored personnel carriers in the Transportation Battalion. We provided, if you will, more direct combat support to the Infantry and the others than would have otherwise have been the case. We did not have a pure logistics mission. We had a mission that was a combination of Combat Support and Combat Service Support. The Battalion I had had three companies of armored personnel carriers, we had a truck company which provided the division transportation support, had a platoon of ducks (amphibious vehicles), because one of the brigades had units across Imjin River, a place called the Spoonbill right up against the DMZ. In order to provide re-supply in a combat situation, we were to ... if the bridges were out or until the engineers could either restore the bridges or put bridges across, we would use the ducks for immediate combat support. In addition to that I had some administrative transportation so it was a unique activity. Partly because of my own Infantry background, my interest in the Infantry, and partly because of the mission that we had to provide direct support to the brigades, I emphasized our secondary mission which was to fight as Infantry. Incidentally, I believe that in a division even today you'll find that every Combat Support and every Combat Service Support unit has as a secondary mission to be able to fight in whatever mode. In other words, in the Infantry Division or mechanized division to fight as an infantryman or mechanized infantryman as the case may be. I think that may still be the case. I personally put a lot of emphasis on that

secondary mission because of its great importance. Let me give you a little war story. I'm shifting now to another area. This is in South Vietnam and we had talked about the retrograde operations, the wind down of operations and at the time when there were very few US combat units lefts. I was talking about the invasion into South Vietnam by North Vietnamese regulars coming down into the 1st Corps ... coming down towards way into Da Nang, an ARVN tank unit fought extremely well but ultimately was defeated. The reason it was defeated was probably not due to the combat operation but to the maintenance, the lack of maintenance support. Why the maintenance failed, I'm not quite sure. What happened was that this ARVN armored unit, the tanks just stopped running. While they were running, they fought valiantly and so on. When the tanks stopped running, two things. One, everybody then had to fight like Infantry and the enemy doesn't care whether you're the maintenance guy or the crewman. He's going to shoot at you regardless so you've got to have the ability to fight. The second part of it was the importance of maintaining your equipment in a ready state, ready to fight. There again the battle was won not because of their inability to fight as armor, they weren't able to fight as an armored unit when the tanks went down for lack of maintenance. At any rate, back to the 1st Cav Division experience in Korea, I put a lot of emphasis on the necessity to be able to accomplish our secondary mission which is to fight as Infantry if we had to. That was throughout the organization. Obviously, the armored personnel carrier companies had to be able to do that because they were more likely to be involved in that kind of a situation and the truck company and the administrative personnel. So that was officers, noncom's and enlisted men. How do you train them? How do you motivate them? Well, get them to understand that they may have to fight in that fashion. Let's see if there's any ... Do you have any other question about that you would like to pursue in that area?

**CPT Felder:** I don't think so, sir. I think, like I said, you've covered it. Believe it or not everything I did my research on you've covered this morning. Let me ask you one question and this is going back to retrograde in Vietnam. For some reason the term "close hold information" on the units that were going to be pulled out of Vietnam was a problem because it was so close hold that they weren't telling the logistics folks who and when things were going to leave even though apparently the Keystone increments were all kind of outlined. One report said that the logistics folks and the debriefing report said the logistics folks weren't prepared because of the fact that they couldn't plan out because of "close hold information."

**MG Antonelli:** That may have been it but I think it may have been something else. The result, yes there is always a close hold aspect because if you're withdrawing from a combat zone, you don't want to give the enemy...and whose is the enemy...the enemy were the Viet Cong, the NVA...You would not want them to know prematurely that you are going to be pulling out and transferring responsibility for operations to let's say an ARVN unit. So close hold was probably a necessary thing and might have been a part of it. I think another aspect is that in the consideration of what units do we deploy, there was a necessity of trying to maintain a balance. I've mentioned to you earlier in talking about the retrograde operations as the wind down, the redeployment got farther down stream as time moved on, we had to be more and more careful, ever more careful about

maintaining a sufficient balance so that you can accomplish whatever mission remained. It became critical then to make some judgments about which units then you would re-deploy. The decisions with respect to redeployment rested not just in Vietnam but also would depend upon the requirements back in CONUS or wherever the forces were going as to what their disposition would be, what home station they were going to go to. A lot of things had to be worked out. All of these meant that you possibly couldn't forecast 6 months in advance precisely which unit was going to leave. One of those slides I showed you, we saw two increments involving the 101st Cavalry Division, too Keystone operations. They didn't all go out at one time. There might have been some juggling even within those dependent upon the best judgment as to what kind of a balance you should maintain Combat, Combat Support and Combat Service Support. As the wind down continued, the activity became more and more a logistic support operation with some combat security, but not much. It's this matter of balance. This is not to say that they couldn't have done a better job in forecasting and planning but those were some of the elements. With respect to the problem that it imposed on the Keystone retrograde operations, I didn't sense when I was there that it was that much of a problem. It might have been perceived by some that it was a problem that they felt they couldn't properly prepare to handle. It seemed to me that we tried to develop a retrograde capability that could be flexible, and could be responsive, and could operate on fairly short notice to a Keystone decision, that is which units to pull out, involving what kinds of equipment, and so on. It may very well be as I think back that some of the problems might very well be that in trying to make determinations of what disposition to make of equipment that it took a little bit of time to determine where best to send the materiel because there were several elements involved; what was required for Vietnamization, what might be required by that unit that was re-deploying to another mission, what kind of equipment would they be taking back with them, what kind of equipment would they be shipping, and ultimately, perhaps not necessarily the same piece of equipment but like kind of equipment to get back, what maintenance depots in the United States would be involved in receiving equipment, and what kind of mission did they have. If it was principally mobility equipment, why it might go to one or two depots. If it was communications equipment, it might go to Tobyhanna, for example, or it might go to Sacramento. How to distribute the workload were some of the elements that went into it. There maybe had been some of those kinds of problems but I don't think it was a major problem.

**CPT Felder:** Well, sir, I think that does it. There's one thing. Oh, I'm running out of tape.

**MG Antonelli:** If there's to be some follow-on, I would suggest that among the things that somebody might cover and that I'd be willing to cover in the future would be arctic and cold weather operations. This has to do with my experience in the Transportation Arctic Group and our activities in Greenland. Another one is the importance of mobility and transportability in the design and development of materiel is another area that might be appropriate to cover some future time.

**CPT Felder:** Like containerization and that sort of thing?

**MG Antonelli:** Yes, well again, the mobility and the transportability in the design stage, in the concept and design stage, designing into the equipment things that'll make them more transportable, facilitate their transportability, facilitate their mobility to assist in the movement process, the transportation process.

**CPT Felder:** Ok, sir.

**MG Antonelli:** Well, all right.