

RESUME OF SERVICE CAREER

of

HENRY RICHARD DEL MAR, Major General

DATE AND PLACE OF BIRTH: 19 August 1921, New York, New York

YEARS OF ACTIVE COMMISSIONED SERVICE: Over 32 years

DATE OF RETIREMENT: 30 June 1979

MILITARY SCHOOLS ATTENDED

The Transportation School Basic and Advanced Courses
The Command and General Staff College
The Industrial College of the Armed Forces

EDUCATIONAL DEGREES

New York University - BA Degree - Biology
Long Island University - MA Degree - Political Science

CHRONOLOGICAL RECORD OF DUTY ASSIGNMENTS (Last 7 Years)

<u>FROM</u>	<u>TO</u>	<u>ASSIGNMENTS</u>
Aug 66	Mar 69	Chief, Rev & Analysis Br (Strat Mob), OJCS
Apr 69	Oct 69	CO, 124 Trans Cmd, USARV
Oct 69	Sep 70	CG, Spt Cmd, USARV
Nov 70	Jul 73	CO, Western Area, MTMC

PROMOTIONS

DATES OF APPOINTMENT

2LT	24 Dec 42
ILT	15 Nov 43
CPT	11 Sep 45
MAJ	8 Dec 52

LTC 15 Apr 59

COL 13 Aug 65

BG 1 Mar 70

MG 1 Jun 72

US DECORATION AND BADGES

Distinguished Service Medal
Legion of Merit w/Oak Leaf Cluster
Bronze Star Medal w/V Device and 3 Oak Leaf Clusters
Meritorious Service Medal
Air Medal
Army Commendation Medal
Purple Heart w/2 Oak Leaf Clusters
Combat Infantryman Badge

SOURCE OF COMMISSION OCS



INTERVIEW ABSTRACT

Interview with **Major General (Ret) Henry R. Del Mar**

The ability to fight and sustain the fight depends on the "total system", from origin to destination. To be able to supply the "teeth" with its required firepower, the "tail" must have the ability to provide the needed resources to the proper place at the proper time and in the proper amounts. To move the 101st Airmobile Air Assault Division from CONUS to the target area, for instance, a total air move was determined not to be the best solution. The optimal deployment was found to be using both air and surface, thus avoiding delays in redevelopment in the target area. It is this kind of thinking, not now the narrow tunnel vision approach, that is required to properly support the "total system".

One of the greatest motivators for a soldier is to see his commander out and about with them. This has been one of the keys to success throughout history, i.e. the Revolutionary War at Valley Forge. For a commander of any level, group, battalion, company, platoon, to be out checking on his men at all hours of the night, in all kinds of weather, to see if guards were getting hot coffee or soup, makes the soldiers realize someone cares. If the soldier has the feeling that someone cares then he will do his job better. The commanders will also benefit. Not only by getting the soldiers to believe in him but also getting to see whether the subordinate commanders are doing their jobs.

In today's modern battlefield one of the basic fundamentals of its doctrine is initiative. This is an important factor in any organization. To be able to develop a way to do something in a new way that is better than the way its "always been done" is vital. Not only in the tactical area but also in the support areas. To train local women to do work that is hard labor, devise ways to assist them in the work, and have them do the work better and faster than their male counterparts is a prime example of initiative. You are going to make mistakes, but it is better to try and not succeed than not try at all.

The success or failure of any tactical mission depends on how well the unit can be supplied. To know what is going on, the support elements must be in constant touch with the tactical elements, helping in the planning of any missions. This constant interaction was vital between the Can Rahn Bay Support Command and the First Field Forces. Plans were discussed as to what could not be supported, as well as what was needed for an upcoming mission. Due to this type of relationship, no operation had to be called off because it could not be supported. If the tacticians or the logistician has been in the others position and knows what his requirements are, this is so much the better for all involved.

INTERVIEW

This is the United States Army Transportation Oral History Program Interview with MG Henry R. Del Mar, USA (Retired). Today's date is the 22nd of August, 1985. This interview is being conducted by CPT Kevin M. Cale.

MG Del Mar: The first overall general statement I want to make is very simply that all of these must be taken in the context of some constructive criticism. Anybody can look back in the past. People make mistakes, especially in the fervor of war. That's not the purpose of what I'm trying to do here. My purpose is trying to give constructive comments so that we can, in essence, improve any future endeavors.

The thing that I really want to emphasize is that the approach should always be a total system, from origin to destination. Now I'm talking about a total distribution system. I spent a lot of my lifetime in the military, 35 years. I continuously see logistics split up into Supply, Transportation, and so forth, with the Transportation people pointing fingers at the Supply people, and the Supply people pointing fingers at the Transportation people -- saying, in essence, the Transportation people want to take some commodity and remove it as fast as possible. That's really not the point of the exercise. It has to be viewed from a total distribution perspective, and I'm am going to give some vivid examples now.

For instance, we had some break-bulk ships come in. As you realize in Cam Rahn Bay, we were responsible for all container distribution. The C-4Js and the Sealand C-4Js would come into Cam Rahn Bay and then I would discharge and put the containers on self-sustaining ships: the old G-2s, the Beauregard, and so forth. We would make distribution of the containers up and down the line. But a typical example was ammunition. We got ammunition on great bulk ships, in the main. I remember one ship vividly, the Green River. They placed ammunition and napalm bombs in the deep wells to take advantage of every inch of space on that ship: commercial loading, so to speak. Napalm bombs are very sensitive things. Once they crack open or they are damaged, the Air Force won't put them on an airplane. In addition to that, once they crack open, they can gel and you have one devil of a time. They put them in the deep wells. In the deep wells, I had no way to unload automatically, and I had to snake them out with cables. A lot of them broke, and what happened was the napalm would congeal on the skin of the ship. I would have to send soldiers down and extra laborers with gas masks and putty scrapers to scrape the skin of the ship. This kept the ship in the target area. We had sappers, rockets, and everything else on us. They kept the ship in the target area probably one or two days longer so putting four or six additional bombs in made absolutely no sense. I continuously cabled back again and hoped to stop the system, which just infuriated me.

We did other things without a total systems approach. One of the things we did was on the milvans. The Army released solicitations for the manufacture of milvans. The containers (this is the 20 x 8 x 8) had been manufactured in the U.S. I don't know how long ago. We get milvans at No. 1, and probably because of the cheapest contract, get them so that the doors won't hold back, so that they're just fantastic jury-rigged deals. They put them on Seatrains. I had the pilot experiment with the milvans. The Seatrains were break bulk ships, or ships good for mechanized equipment or helicopters - square decks, roll-on/roll-off, with two 40-ton cranes. What we had to do was snake these things and pull them from vast expanses of that ship to the square of the hatch, then pick them up with free lines and try and put them on the chassis they had built for them. Two of them would go in tandem, with little pivot points to put them on. That thing swinging in the breeze of the monsoon would take us forty minutes, sixty minutes for one milvan.

You know it just made absolutely no sense. No sense whatsoever, and therefore, the ships should be loaded for the target area as the objective. They should not be loaded for ease of commercial loading or for the commercial ports, including the military ports, to see how much money could be saved, because the money saved, just crucifies the people in the target area. Exposing them to enemy action is just a total loss.

CPT Cale: In dealing with loading the ships, who are the people that actually load the ships back in CONUS [Continental United States].

MG Del Mar: The Military Traffic Management Command [MTMCI] is responsible for all military loading, even the commercial loading. They are responsible and must ensure even at commercial ports. Their supervision should be over commercial ports when loading for a target area so that they ensure proper loading.

A typical example is what I did to remedy the napalm situation. We started putting napalm bombs into containers; in fact, they were Sealand containers. Those were the only containers we had, the only container service we had. By using a tape measure, we cut a few inches out of the crates and increased the container load by a third in napalm bombs. I looked at the bombs themselves and saw that no damage occurred. First of all, they were better protected in the containers, and we could expedite the handling of them just by cutting a few inches, in addition to cabling back to the Army Material Command [AMC], which was under General Frank S. Besson at the time. I don't know whether it was six or eight inches because the crates were rather wide. They were just crates on top of napalm bombs.

That's when you look at it from a total-systems prospective. It should be the same as an air drop, you know, and the same as a parachute drop. It should be a backward planning sequence -- a sequence of events that makes you see what to do with that ship and realize that on these over-the-shore operations, operations where you have the DeLong piers, and so forth, in a target area, that you don't have all this sophisticated equipment. And that's what it should be loaded in.

CPT Cale: So what you're saying is that instead of having Transportation people, Quartermaster people, and Ordnance people, that we are all logisticians and that we should be trained so that the Transportation folks can think logically as to how every system intertwines with the other?

MG Del Mar: We need the technical people and the technical services. But we should never let one dominate to the point that it really inhibits and detracts from the overall system perspective. They all have to be parts of a puzzle, and they all have to fit together. Overall control must be maintained in all of this so that someone knows. MTMC is responsible for the loading of the ships and should maintain control since it is responsible for the stowage. MTMC personnel should be the people who react and who are totally in charge. They should react to any of the requests and experiences that people in the combat areas signal. I think that's a very important point. No matter what you do, you'll never have the equipment that you really need. You'll never have the sophisticated commercial equipment that's designed for purposes of economy and speed. Even if you do have that type of equipment in the target area, I don't know whether it's feasible to maintain it. You have to make do with what you have in a target area, and that should be viewed as a prime objective when you load anything. Even when you design equipment, you should design it with one thing in mind. It should be designed for the purpose that it has in the objective area when under enemy fire, and for ease of maintenance because maintenance is horrendous. In Vietnam, we tried to keep those multi-fuel vehicles going; they were the most horrendous. Those and the APCs [Armored Personnel Carriers] were the most horrendous deals I ever had in the Engineer equipment.

That's one point you have to do; the other point you have to do is in the general statement. The tactical people and the strategists develop their TO&Es [Table(s) of Organization and Equipment] and change and adapt them to different types of warfare. We had the battalion division, the three maneuvering brigades, and all the other divisions that we've had. They continue to evolve what they feel are the easiest to maneuver fire-placing elements that they have. Logisticians before the time of Vietnam didn't organize; they vulcanized. They do not evolve proper TDs [Table(s) of Distribution] and TO&Es because, in an era where firepower is so essential, we expend ammunition like you've never seen, and even now we are still mesmerized by this.

General Creighton Abrams made a good statement one time in front of Congress. When we were talking about tail-to-tooth and tooth-to-tail, he said, "foxholes are really lonely places. You know, it's like the old alligator. If the old alligator didn't have a tail to propel itself into the area where he's going to use his teeth, his teeth wouldn't be worth a damn." With such expenditure as we have lately on vast amounts of ammunition and so forth, we don't develop supplies. With such a consumption of tanks, materials, and everything else, supplies go by the wayside. Once a couple of VCs [Vietcong] with an RPG-7 knocked out one of the tanks, so my point is that the TDs and so on of the logisticians should have a great degree of flexibility in them.

For instance, they never allowed for garrison purposes in Cam Rahn Bay where my headquarters was. I had the Cam Rahn Bay Support Command. I had Nha 'I'rang, Phan Rang, and Phan Thiet, which were the supply bases for the entire southern task force. Phan Thiet was one terrible place to get into by road. By sea, there was an 11 to 12 foot gradient in the tide and a small pier that we rebuilt over and over again that we couldn't even keep. It eroded, and so forth.

I put logistics supply activities in Phan Thiet, Buu Loc, Ban Me Thout, and Da Lat to support the tactical elements that were active in those regions. We never had the proper people or the number of people that we needed. I ran LSAs [Labor Service Agency] for 27 to 29 people in small barbed wire entanglements. It reminded me of the Foreign Legion, continuously under attack. In those places, we didn't have enough people to defend them, the proper equipment, or the proper people to maintain that equipment. This should be looked at so that we have cellular, flexible outfits.

At Can Rahn Bay itself, a place that had one of the biggest depots, we had no approval for motor pools or for guards. We had the only rebuilt facility for certain types of 5-ton trucks, APCs [Armored Personnel Carrier], engineer equipment, and so forth. This huge complex, with hundreds of thousands of tons of ammunition, supplies, and so forth, had no guards. I had the 54th Support, the organic battalions, the Signal battalion (which worked 24 hours a day), the Ordnance battalion, and the Quartermaster battalion. I had to use them; they worked by day and had to guard at night and in the daytime. This is almost impossible to do since men get tired and are not alert.

At that time, we had no approval for any administrative vehicles. This may be an erroneous figure, but I believe we had over 2,018 vehicles without approval of any of them. This was over the total Cam Rahn Bay. I even supported Nha Trang and the First Field Forces. When that happens, you cannot evaluate and analyze the proper consumption of parts; therefore, you don't reorder parts with all the consumption factors that you should have. Everyone starts to pilfer. They take from authorized sources, and they bring to the sources that are not authorized. This creates a fiasco.

Another comment I want to make is that when I became the commanding general at Cam Rahn Bay Support Command in Vietnam, I was responsible for the First Field Forces, or the tactical field forces. They are two things: It is utterly essential that the logistics commander know everything that the tactical commander is planning. I had a fantastic relationship with General Collins, Ace Collins. LTG Collins was one of the finest and the most capable tactical commanders I saw. I attended most of his staff meetings. I knew far in advance whenever he was planning something, and he and I would discuss whether I could support it or not, whether the locations were feasible, and whether the avenues of access were proper. With the timing that he gave me on all his thoughts, we never had to call off any type of operation. We succeeded, but the logistic command and the tactical command have got to practically live together. I got to know all of his thoughts and what he was planning, and so forth.

One of the most vivid mistakes that we have ever made as logisticians is that, in spite of all the helicopters (and I would state unequivocally that I think Vietnam was entirely covered with helicopters), I'll be damned if I could get any. I had no helicopters in my command, no CH-47s, nothing. When I needed a mission accomplished, I had to depend on the Air Force, which did a fine job. But occasionally that organization would have an overriding mission which would prevent me from getting my C-130 or C-7. Here were vital supplies that I needed and major weapon systems that I couldn't get spare parts for because I couldn't get helicopters to take them out. The command itself covered an expanse of 15,000 square miles. I had many places to support and, if I couldn't get a spare part through for a 155, or self-propelled 155, that major gun was out of action. Any logistic command that is responsible for supporting an Army in the field should have a method of getting there other than by road and boat.

I had the 10th battalion, which had my heavy boat company in it, but we had to improvise all the time. We used LCUs [Landing Craft, Utility] which were never designed to go out of that harbor as far as Nha Trang, Phan Rang, and Phan Thiet in the high seas. When you know what their armaments are, you know waves can come right over them. Nor was that my predominant problem. My predominant problem was communications. Those LCUs had World War II communications equipment on them, radios that wouldn't reach farther than five miles. I invented a system to keep me aware of the condition of crews that were out to sea - and cargoes, a system by which they could patch radios if possible while swift Navy boats patrolled. That's how we survived. Every time I lost track of one crew for more than five to ten hours, I requested the Air Force or Army to go out and search for them. But that's a terrible way to run an organization.

When the commercial people who handled the contracts banded with the Navy Alaskan Barge and Towing [ABT], their tugs had Collon sidebands that would carry -- I don't know what the distance was. But they had the best communications material that I've ever seen in my whole life. The Army couldn't get any of it.

These are points that I bring up, not in criticism, because this was a come-as-you-are war. We had to go in and do the things we did, but these things should be remedied, or at least looked at before they are allowed to continue.

When an operating agency is located in a headquarters that's in the field, the top headquarters should not have the prerogative to research anyone coming in theater -- first, by the top headquarters, which at this point was MACV [Military Assistance Command Vietnam]; second, by USARV [U.S. Army, Vietnam]. They would look at all the files coming in. By the time you got anybody, the operating agencies out in the field that desperately needed talent and people, were the last guys on the totem pole. I operated the 124th when I arrived, but didn't have an operations officer and I didn't have a deputy. Here was a 24-hour a day operation with no deputy. I don't know how long it was, and it was difficult to get stevedore officers. You had to fight for them but in the headquarters they rarely had any shortage. That condition should not be allowed; priority should go to the people that are out in the field operating, not the staff agencies.

CPT Cale: Most of the predominant points you have made have concerned getting the proper equipment and people to the proper place.

MG Del Mar: The proper place and the planning should always be dedicated to a total systems approach that is oriented toward both personnel and equipment -- a total systems approach.

CPT Cale: So that everything works together and flows?

MG Del Mar: That's right, and that day is going to come which I told General George Blanchard when I was commanding Military Traffic Management Command [MTMC], and it applies to Vietnam, too; the day is going to come when the logisticians and the distribution people, the entire wholesale system, should be, regardless of geographical boundaries, under one person. I'll draw an analogy to what I'm trying to say - let's take the transportation system. In this case also, the transportation system, from origin to destination on wholesale should be under one person. The MTMC commander should command and be responsible for all supplies that come from the point of origin to the wholesale node, regardless of where it is. If it's in the theater (let's say Germany) that wholesale node should be the forward edge battle area [FEBA], or if it is the corps' rear bound area, or if it's a railhead, depot, or whatever, that cargo should be delivered right to that point. There, the theater commander takes over and is responsible. But the theater commander holds the wholesale commander responsible for the delivery of those supplies. He has one person to look at -- not all these elements that we now have. It's difficult to know who to look at, where the container is and why the container was here.

Commercial transportation is well-handled in the European theater -- maybe not in parts of Southeast Asia or Southwest Asia. Commercial transportation is very capable of delivering to the wholesale node and, then, because our problems used to be predominantly unit delivery, that's retail. That's what the unit commander should be worried about -- where do you find the truck companies and how do you develop the method to deliver the vast amount of ammunition necessary? That's the way the system should work.

CPT Cale: So we should be more concerned with getting it from the wholesaler to the individual unit itself?

MG Del Mar: Yes, the retail delivery. But one guy should be held responsible. When I first took over MTMC, we would still have been the same way if it hadn't been for George Blanchard. The ports were under the Commander-in-Chief [CinC], Europe. Since the ports were under the Commander-in-Chief, Europe, their command didn't make any sense at all because, in fact, I knew more about the ports than the European command did. I was the person delivering to those ports.

What should happen is that the ports should be under the MTMC commander, who controls the whole system. They should be under the operational control of the theater

commander; he designates the task. In other words, if he wants to divert a ship, if he's planning to conduct an operation that is predominantly north, and if he weighs the logistic advantage to the south, he has that power under operational control -- the designation of the task. Then he should use that power of operational control to spend more time on the tasks, the ports, or whatever lines of communication provided.

The wholesale commander should be in the command. Therefore, the tactical command (the CinC) has one person to rely on. Whenever something is not delivered, whenever something is late, whenever something is wrong, he points his finger at the wholesale command and says, "Buddy, what happened?" When the ports were under the European commander, I could never find out who damaged what -- whether my people at the point of origin caused the damage or if those at the recipient point were responsible. "No, my people at the point of origin caused it," and the game goes on.

CPT Cale: So, putting it under one person would identify those in charge?

MG Del Mar: You have a responsibility. Look at World War II -- we even ignored the lessons of World War II. We had Lieutenant General Brehon Somervell in charge of all of supply; General Eisenhower had one person to look at. Him.

CPT Cale: And it worked effectively?

MG Del Mar: Of course. What bothers me is that we have in this world a formidable enemy to face, and the tacticians and strategists have a terrible problem trying to face this enemy. They never will. All of the problems that I have seen are really basically logistic in nature. How are we going to support people when we put them in enemy territory?

For instance, consider a container system. People talk about containers as though they have to live with them because they have to live with anything that is commercially viable. If it's not commercially viable, we don't have what we need to maintain it. We can't set up our own transportation worldwide in the defense forces. The budget can't stand it, and it shouldn't. It should be an industry or a military partnership, and we should be able to benefit by those commercial deals.

A container system is an integral part, but just one part; one portion of a total system. When we consider the container system in Southwest Asia, we're mesmerized with looking at containers or saying, "how are we going to get them off the ship and on to the shore?" That's not the problem - we can do that all the time. Now, the Navy uses containerships and container cranes on ships. That's fine, but we did it in Vietnam, and we did it with the DeLong piers and container cranes. The problem is roads. The only reason that containers were successful in Vietnam is that we built dual highways all over that place. Without roads in Southwest Asia, what do you do with a container? So, you get it on the shore; then what do you do with it? Do you unstuff it? You don't have heavy-lift helicopters to take away the ones you want. So then, the container becomes a problem. If you stuff it, you have a distribution point over there -- a break-bulk

distribution point. Then, you have to get the container back on the ship again. So everything has to be looked at according to a total perspective -- a total system. If anything, they'll look at my speeches of twenty years ago about total systems.

CPT Cale: So, a tactician needs to look at the logistics factors involved in his tactics and a logistician must also be a tactician to comprehend the requirements?

MG Del Mar: A logistician and a tactician are opposite sides of the same coin. You can't separate them. A logistician who is not sensitive doesn't understand the tactical situations, has no idea what problems face the tactical troops, the tactical commands, so forth, and has no place in the military at all.

CPT Cale: Which has priority - the tactician, the logistician, or the situation?

MG Del Mar: The situation always has priority; the tactician and the logistician should always be mesmerized and obsessed by the situation. They are both there to complement each other. The tactician is the one who is delivering his life on the line to achieve the objective. That's like saying a body can be active without a vascular system; the vascular system is comprised of the logisticians. Without the delivery of nutrients to the cells, that body can't accomplish what it should. That's how close the relationship is, and has to be that way. You can't treat the vascular system as a system separate from the body; it doesn't work.

CPT Cale: Earlier, you mentioned what with all the new equipment that is being developed, we cannot supply ammunition fast enough. In developing a new system, should more concern be focused on dealing with its logistical support than what there is presently? And how do you design the support elements to support the system in the commercial world?

MG Del Mar: I think you have to begin with rudimentary facts. The first thing you have to do is tell Congress in monosyllabic terms what the true nature of current warfare is: the consumption and destruction of material in preposterous amounts and this tooth-to-tail separating. It's like saying there's a separation on the crocodile between the tail and the teeth. If you cut in half, it isn't going to work. Or if you tell the crocodile that only 1/7th or 1/20th of it can be a tail, you probably won't get the teeth in the proper place.

So, there must be one system. I know that it will be treason and blasphemy to some, but if I had my way, the day would come when I would make everyone a logistician. Every deputy or vice-commander would have to be a logistician, but he would have to have tactical experience.

I talked to General Frank S. Besson, Jr., right before he died a year and a half ago, and the point that came up was that all Transportation Corps officers, and I'm talking about Ordnance officers and everybody else -- all technical services, all combat support, and all combat service support -should spend a period of time with the tactical forces. They should get to know them better. If they don't know the problems in the field, they can't

possibly be sensitive to them; and they can't really operate a logistic system the way it should be operated.

CPT Cale: Now you mentioned that you had been in touch with General Sidney H. Collins all the time?

MG Del Mar: All the time -- from the first day I took over Cam Rahn Bay, when General Walter Woolwine and General Creighton Abrams told me to go over there. I went over to pay a courtesy visit to General Collins and he invited me to come to the staff conferences that were at 7 A.M. I was out of my office; I was out of Cam Rahn Bay; and I went up to his headquarters (1st Field Forces) in Nha Trang. I was out of there at 6 A.M. and met with a liaison officer, too. So, we knew (each other) all the time.

If it weren't for him, his headquarters, and his artillery people (ones like Charlie Hall, who commanded the 1st Field Forces Artillery), I would never have had helicopters. And, if I wasn't a personal friend of the Air Force Commander at Cam Rahn Bay (who commanded the C-7s, the DeHavilland deals, and Abbott Greenleaf), I wouldn't have had any planes. You know that isn't the way it should be done.

CPT Cale: You had previous tactical experience before you joined the Transportation Corps?

MG Del Mar: As a rather young second lieutenant, I served in World War II, and I had combat experience throughout. I was an infantry officer during most of the war. I didn't become a TC officer until 1956 or 1957, when I was with Werner Von Braun, and MG John B. Medaris, and the Missile Command. But, I was a tactical infantry officer and a basic infantry officer.

CPT Cale: Did that background help you understand the tactical situation in Cam Rahn bay? Did it give you an advantage over somebody who is straight TC coming into that position?

MG Del Mar: I couldn't overemphasize that. My background not only gave me the advantage of knowing tactically what was going on; it gave me the advantage of being sensitive to the problems of the soldiers out in the field. In Guam and Okinawa, sometimes it rained five days at a time, and we didn't get any ammunition. When you're in a foxhole without ammunition or food, it impresses you for life; and I say that rather glibly. So, I had the advantage of experience; I can't overemphasize that. You can't deal only in theory; many a test tube has been blown up by chemicals that worked perfectly in a balanced equation on paper.

CPT Cale: But not in real life. With the present system having your tactical people and their different branches segregated, including Combat Service and Combat Service Support and their branches, how do the combat service support people get their experience in the tactical field so that they can understand the tactical situations and everything surrounding them?

MG Del Mar: Well, I think what the Combat Service Support people do is limited. Exercises are read into exercises; they're read into the concept of the operation; they're read into the enemy situation and the friendly situation. But, again, we're dealing only in theory. Exercises like, for instance, the European exercise, the redeployment forces, Germany (REFORGER), are good. In 1976, I think it was, we went back to surface. We loaded the ships, as we would have done in wartime, but not for combat. They weren't combat-loaded for assault, but for ease of discharge, collated to unit equipment and cohesiveness. The European Command (the CinC) supplied people to read us into Rotterdam and so forth, and into Amsterdam, where we landed the ships and were read into the exercise completely. It is still too compartmentalized when you consider that port personnel are remote from those on the front.

A typical example occurred when we started strategic mobility at the time I took over in MTMC. General Abrams asked me how we could deploy the 101st Airmobile/Air Assault Division as fast as possible, so I conducted a sensitivity analysis without MTMC personnel. Although the 101st had problems with air, it seemed to be the most expedient method. My orders for the sensitivity analysis were to employ all air and all surface, thus optimizing both air and surface to see how we could do.

By using all air, we discovered some incredible things. The CH-47s caused us the biggest problem we had in the 101st. The Chinooks had to be totally disassembled to get them into C-141s and the C-5s. The empennage had to be removed, and so forth, and I believe it took approximately 220 hours for all kinds of mechanics and a special battalion of aviation maintenance people or a company to disassemble all the special types of equipment, put them in the aircraft, take them to the other side, and put them in the target area. Then, it took about 400 hours to reassemble and test-fly them to ensure they were operable.

Well, when we discovered that, we added the time required for disassembly and reassembly and considered that reassembly took place within the reaches of the enemy in the target area. When the division landed in the target area, the loss of the heavy-lift helicopters made it incapable of deploying its artillery and other equipment necessary for combat. Certain types of ships had the lighter barge aboard (on both those ships and the Seabees - I think Prudential had about three Seabees). So, we discovered that if we left the barges off the lower deck, we could just wheel the entire three squadrons of 48 helicopters on the elevators, without any disassembly at all, remove the rotors, and stow them right within the fuselage so that they wouldn't have to be rebalanced. This is ultimately what we did. We could get the division to its destination in fighting shape and deploy it in the target area. Then we could take the helicopters out and remount the rotors and take them off of the elevators. They would be ready to go in just a day or two more than if we had gone completely by air, and they would not be targets in the objective area. We couldn't get the barge ships, but we put heavy-lift helicopter Chinooks, the CH-47s, on the weather decks of the Callahan. The Aviation Command designed plastic cocoons for us; we put the cocoons and containers [CONEXs] around them because it was January on the North Atlantic. Even so, I was taking a chance.

We managed to get the helicopters to Amsterdam and Rotterdam and took them off the ships. We put the tanks on some seatrains we had renovated -- Seatrails to carry an armored battalion -- that's another story. You need to pay attention to the type of ships available, if possible. The unit of transportation must match the characteristics of the cargo and the commodity that it has to carry. The Victory ships were mentioned, but they could only carry a few main battle tanks (and these were M-60s), and only in the No. 3 hold, if there. You need about six to ten Victory ships to deploy one armored battalion.

We took a 35 year old Seatrain, which had been renovated, and one armored battalion (with its personnel carriers, tanks, and everything placed right on that ship) and put them into the same harbor. We were discharging simultaneously as we were taking the tanks off and putting them in the rail cars to go down the road, and the helicopters were taking off. Total planning caused it to become a good operation. Deploying the 101st in that situation was actually beneficial because it optimized air and sea. You send the troops over by air to meet while you keep skeleton crews aboard the ships on which you're deploying the major weapon systems to keep them in operational order. That's how you plan and analyze from the total perspective.

CPT Cale: At Cam Rahn Bay, in Vietnam, a lot of the new people practically had no combat, tactical, or logistical experience except from school training. How did you teach your logistical people, who worked on the docks and so forth, to master both sides of the same coin so that they could understand both worlds? How did your people learn about the other world?

MG Del Mar: That's a simple story to tell, but I had an even more difficult problem than that. I needed stevedores, and the stevedores that we ultimately chose were Vietnamese women. We couldn't get any Vietnamese men because, reportedly, they were all going into combat. The 870th Stevedoring Company had very few people with stevedoring experience and so we started a stevedoring school to teach the Vietnamese woman how to stevedore. The ten or

twelve gangs at Cam Rahn Bay were predominantly women, and they broke all records on the Sealand ship.

Fastening the quick fasteners on the containers to put them on the chassis was difficult for the stevedores, but we were innovative enough to perfect 18- and 20-inch pipes which they could put on to give them are leverage for fastening. So, while we were training these people in stevedore skills, we were taking our own people and putting in any of the tactical people who (for whatever reason) were incapable of pursuing the tactical unit objectives any longer. We had many of these people, so we tried to work them in as logisticians.

The point is leadership. Formal schooling is limited, so leadership training consists of on-the-job training programs. You're going to make mistakes but, on the other hand, I've always condoned the crime of commission -- never one of omission. I found that the

people who made no mistakes were the people that did nothing. The people who made the mistakes were the doers, and the doers were always in trouble; but I'd rather have the doers than the people that don't do anything to avoid making mistakes.

CPT Cale: You were mentioning, as well, that you had to provide your own forces, a stevedores by day or guards by night or similar situation. How did your people work 24 hours a day -- doing one thing for 12 hours and something for the other 12 hours -- and manage to maintain that kind of momentum? How is that possible?

MG Del Mar: The concept is not profound. It's not anything that we haven't known and put into practice for years - from the Revolutionary War to the Civil War to the present. Look at the Revolutionary War. Now how did they do all the things that they did at Valley Forge? I discovered that as far as I'm concerned, the one thing that made success was to keep the commanders in.

You can't have forces that are supposed to work 20 hours a day and have them work 24 hours a day, while the commanders and the command hierarchy, including the noncommissioned officers, rest and have cocktail parties at 4:30 in the afternoon. Everybody has got to be out, including the commanding general. When I was at my own base in Cam Rahn Bay, I roamed around that place at 11:00 at night and 2:00 in the morning. I went into the ammunition area and challenged the guards, saw whether they were getting hot coffee, saw whether they were getting soup or something, and asked them when their commanders had checked those posts.

When I say "commander", I mean that the group, battalion, company, and platoon commanders answered to me. I made one discovery. If the group, battalion, company, and the platoon commanders weren't out and the noncommissioned officers weren't out, then the poor soldier was out there alone. That didn't happen anymore -- everybody was out. I wouldn't care how tired they were -- they could sleep in jeeps or rest whenever they got the chance. That's the sole secret to it - teamwork.

Another thing I really feel strong about is curbing post exchange supplies to the maximum extent possible. I'm totally against what we did in Vietnam, where I could have sunk Cam Rahn Bay with the amount of beer consumed over there. For me, to see APCs, tanks, and everything else covered with cases of beer just doesn't have any place in war. You have to be alert in wartime. If you're tired, all you need is a couple of beers and you're lost; too many people get lost that way.

I feel the same way about electronic supplies. How would you like to stop your jeep and walk up to a soldier on the periphery who doesn't even know you're there because he's got earphones plugged into a radio that's playing rock music (not that I'm against it [rock music]). How's that soldier supposed to know that a VC is standing behind him ready to cut his throat?

CPT Cale: So what has to happen?

MG Del Mar: What has to happen is that the American forces stop a luxury on the battlefield. We are a representative society, but in wartime-- we are united people with one purpose in mind. When we hit that battlefield, we must be dedicated and ready to go to battle, and we're fighting people who give no quarter.

The first time I went to Cam Rahn Bay, I called an alert. I'll never forget it. Many of the officers missed the alert because they were at the Officer's Club having some kind of dinner. I cut that one out fast, not because it wasn't allowed, but because it interfered with them showing up for the alert. We try and bring some of the comforts of home to the soldiers in the war zone but they really have no place on the battlefield itself.

CPT Cale: Would getting off the battlefield and back one step be fine?

MG Del Mar: No. Back one step? You don't back down in today's war. We were in Cam Rahn Bay. Although I cut off supplies to some of the population, I didn't cut all of it off, obviously. We had about 20,000 indigenous personnel coming in to work in the depots and other places, and the pilfering was so bad that we had to put a stop to it. We started to inspect our resources -- we checked everybody going out and every truck and requisition, validating the requisitions with general release orders.

Then we started to get hit all the time, but always we had emergency plans. The tank farms were a typical example. We had extensive 20,000- and 100,000-gallon tanks, some of them riveted. I devised a contingency plan to put together every water truck. At Cam Rahn Bay headquarters, whenever we were hit at night, those water trucks would be available to run into the tank farms accompanied by search squads - to run where people had put explosive devices, and so forth. We got hit many times. We lost one tank that I know of, saved many tanks, and then flushed the wall of water down into the wells.

At Nha Trang, we had 6-inch and 8-inch pipeline. Whenever the enemy's sappers graduated, they got their degree or something similar by blowing a pipeline. In addition to that, many of the civilian population kept their motor scooters and mopeds going because of our pipelines. The problem was that when they made dents or holes in the pipeline, thousands of gallons were lost. I devised a plan to put one-way flow valves in to that; if the pressure went down, the valve would control it. Sometimes simple things that we know from commercial lives, those are things you have to consider.

CPT Cale: Are there times when the military needs commercial items brought in?

MG Del Mar: You need to talk to the people that run this commercially to see what they do.

CPT Cale: So there needs to be more of an interface between the military and the civilian community?

MG Del Mar: Anybody that criticizes the military industrial complex simply doesn't know that the freedom of the United States depends on the military industrial complex. I have no doubt about that. On the other hand, anything excessive is wrong. It's absolutely wrong. Important events occur both on the battlefield and in Congress. The Navy is a typical example. The Navy can't have civilian sailors; it can't have civilians aboard ships that support the fleet. Navy ships have 100 or 200 technicians on board to control the radar and the other equipment.

Consider Vietnam and the Army. We ran our helicopters with support from Vinnell Industries personnel -- all civilians. That can be carried too far also. We cannot be too dependent upon civilian contractual services, and so forth. Even in situations where we need their support, we must have military people that know as much, or nearly as much, as the civilians that are contractually obligated. Then we know whether they're doing a decent job and what's going on. Otherwise, the commanders are helpless.

CPT Cale: Earlier you discussed Vietnam and people stealing, pilfering, and so forth. You said that you performed inspections when personnel departed?

MG Del Mar: Yes, a typical example was what I discovered when I first arrived concerning some of our allies coming into the depot on trucks. We had Vietnamese girls look at requisitions and keypunch material release orders. All they had to do was keypunch material release orders that were then transmitted to the correct office. The trucks went into the depot based on information in the material release order. The equipment and commodities would be given out, and so forth. Then, the trucks would be loaded and prepared to go. Theoretically, it was all based on a validated requisition.

For various reasons, or perhaps for devious reasons (maybe that's a pun) the operators would punch a material release order even without a valid requisition. I changed that system. I had a field grade officer validate every requisition that came into that depot. No one could order a material release order. Furthermore, the signature, serial number, and all other pertinent information concerning the officer releasing that material release order, together with the authenticated requisition, had to be placed on file.

CPT Cale: So, you controlled everything going out?

MG Del Mar: Yes, but it was such a difficult job because you have to remember that, in Vietnam, we had such strange weather. We found miles of snow fence in Cam Rahn Bay depot and inadvertently, it became very useful to us. At about midpoint of the Vietnam Conflict, we were also in the middle of the two monsoon seasons. We had the monsoon in the north followed by the monsoon in the west. On the other hand, Cam Rahn Bay could be, at times, the greatest sand trap in history. The shifting of the sands would cover the roads and everything surrounding, so I put up the snow fence to inhibit the shifting of the sands. It worked out very well.

You know, you don't need a hot-air heater in Vietnam. But they were used because of the Push System and the Army Material Command [AMC] under Frank Besson. When

the conflict or whatever the action was called first started, you couldn't wait for people to requisition, but you didn't have troops that knew how to requisition and you didn't have logistics people.

Not all, but the preponderance of the logistics units were in the reserves, and the administration decided never to call up the reserves. So, we finally put in anybody and called that person a logistician. Since they didn't know how to requisition property, the Push System was fine at the start. What was wrong was that the depot commanders and the other soldiers had equipment in their depots that they had been trying to do away with for years so they finally moved everything out. That was what was wrong - human fallacy.

CPT Cale: So, the Push packet was designed to get as much as possible to the units?

MG Del Mar: Initially, when they were incapable and unable to requisition and put in the normal cycles, it was designed for that.

CPT Cale: What was in these packages that were being pushed? You were saying everything from heaters to snow fences.

MG Del Mar: Everything -- the rations and varied rations -- ammunition and so forth. Nobody had any experience, so it wasn't based on consumption factors.

CPT Cale: Previous historical data from World Wars I and II and the Korean War didn't apply?

MG Del Mar: To coin a phrase, it fell out the window -- it just wasn't applicable. World War II was a totally different war. You had armies advancing on various fronts and you had lines of supply and logistical support. Vietnam didn't. Vietnam had Cam Rahn Bay, Saigon, Dan Nang, and Qui Nhon; these were the logistic hubs that we had to work out of. Then, we started getting all the troops that they had trained to handle the situation. First of all, we supported the Vietnamese, the Marines, the Koreans, all kinds of different organizations for which we had no artillery consumption factors. No one restricted this consumption; no one told the artillery to limit the rounds of fire. You don't get a unit of fire. We just had to keep force-feeding everything, and some of the expenditures were greater than any we had experienced formerly.

CPT Cale: So, everything was just pushed forward and this didn't affect the situation for a certain period of time?

MG Del Mar: Not until General Joe Heiser motivated the First Logistics Command to really get started. They had the requisitioning unit putting the information into the computers, which would be transmitted to the headquarters of the First Logistics Command, Long Binh. This created some semblance of order in the situation, but you still have to realize that under such circumstances, certain mistakes will be made.

The biggest laugh of all was the number of telephone poles we got. Something went wrong with the system and, as far as I can understand it, we got telephone poles like you wouldn't believe (this may not be a true fact). The computer system would requisition one 20-foot telephone pole, but we would receive twenty 20-foot telephone poles, and we got telephones out of the neck. The system caused us to have a preponderance of telephone poles, but those things happen in wartime. I don't criticize that -- those are human mistakes and we are all human beings.

When I first arrived there, we had a depot on the peninsula of Cam Rahn Bay. How could you protect this depot? You could put concertina (wire) all over the place, but the VC could come through concertina in 22 seconds without even getting cut. So I put up all the telephone poles and took the lighting systems that I had in the depot, and I put them all over the periphery. Well, the USARV engineer in Vietnam came down and, when he went back again, I received a back-channel message to inform me I was liable to court-martial for spending too much (I don't know what the figure was) without authorization funds for putting up these poles and lights. I went back again (I'll never forget how I answered) and I said that, as far as I was concerned, I hadn't expended anything because the poles and lights were still part of depot stock. If anybody had wanted them, I would have pulled them down and issued them. I was just using them in the meantime. It was irrelevant whether I stored them horizontally or vertically.

CPT Cale: Once the First Logistics Command came up with the push concept, and the push of packages was slowed down, how effective was getting material from the depots in Cam Rahn Bay to the units themselves? How did that system work?

MG Del Mar: I would say that, in my estimation, the system worked really well -- especially in view of the myriad demands placed on it. That's the first war I've been in that I've ever been in that I've ever seen troops get tired of roast beef. We gave the combat troops cottage cheese and ice cream. The food was just fantastic. The super-human effort that small groups of logisticians put out to supply these guys with food, gasoline, repair parts, and so forth, was really admirable. And I know of no situation where they ever ran out of ammunition.

CPT Cale: So, the Combat Supply request for ammunition was not really a concern. What you needed was what you got?

MG Del Mar: What you needed was what you got -- my complaint was that demands became unreasonable at times. We were going to give soldiers in the field in Vietnam everything that they had in garrison back home in the States; but, in wartime, that seems to me to be an unrealistic perspective.

CPT Cale: Are you saying that, when it comes to combat, the soldier should be in a combat zone and that that's the sole reason for being there?

MG Del Mar: That's how it is in the combat zone. But in terms of the Vietnam conflict, let me say one thing; the 1-year tour of duty system was very detrimental. Soldiers would

arrive and go through orientation. Then, before they could learn what was happening, a month or two would pass, and they would expect rest and recreation [R&R] for 1 or 2 weeks. By the time they came back, they would be looking forward to the end of their tours one-month before they were ready to leave. Some guys worked right up to the last minute; but that was not a good system -- not at all.

Another system that should be changed is that you undergo an in-depth briefing when you first go into the theater. When I first went into the theater, I was briefed for three or four days at Long Binh. The briefing was very thorough. But, to a neophyte who is not familiar with the intricacies of the organizational setup, a lot of it went completely over my head. I came from the Joint Chiefs of Staff, so I didn't know the intricacies of this organizational setup or even where everything was. The briefing should evolve over a period of time, and it should evolve after you've spent some time in the theater. A preliminary briefing is fine, a superficial briefing, but it should occur after you've spent some time in the theater. Then you should be briefed so that everything becomes cognizant and more cohesive and you can understand where the units fit in and where the change of command fits in, and so forth.

At some time during our discussion, you asked how does Cam Rahn Bay fit into the logistic picture? Well, Cam Rahn Bay was a hub -- it really was. Saigon was also a hub, but Cam Rahn Bay had a unique role to play because extensive use of containers began here. This was not only the wave of the future, but also the flavor of the week, because containers avoid re-handling, and so forth. I'll give you an analogy to that.

The first ammunition ship we put into Cam Rahn Bay was a container ship. Cam Rahn Bay was responsible for deploying and distributing all containers. As I mentioned before, the big C-4Js, like the Panama, under Captain Lou Hassell, came in. They came in Sealand ships into Pier 4 at Cam Rahn Bay where I transshipped the containers to the C-2s -- the Beauregard and another ship. I think it was the Raleigh. These ships which went to Saigon, Da Nang, and Qui Nhon, were self-sustaining. The containers were taken off, put on chassises, and locally distributed. So Cam Rahn Bay really was a hub - it was an extremely important place to be. The harbor in Saigon was too crowded, so you had to go up the river to do all these things, and it was very narrow,

Concerning ammunition, we at Cam Rahn Bay, General Besson and Malcolm McLean of Sealand, tried loading ammunition in containers. I got the first ship. It was the Azalea City, a self-sustaining Sealand ship, into Cam Rahn Bay on a project where they loaded 226 containers on the ship with ammunition. They came into Cam Rahn Bay. I discharged them in 22 hours -- 22 hours for 226 containers. The containers were put on an Alaska Barge and Towing [ABT] roll-on/roll-off barge, and then they were put on the John D. Paige -- the whole 226. We brought them up to Qui Nhon, took them up to landing zone English, and fired the rounds. I had worked on jury-rigging the pallets of ammunition out of the containers because we didn't have any low-mass electric forklifts or anything like that. We would snake them out, pull them out in rough-terrain forklifts, and so forth; then, we would fire the rounds, put the brass back into the containers, and bring them back to Cam Rahn Bay in 6-1/2 days. That allowed us to about five

handlings. Much innovation occurred at Cam Rahn Bay, and Cam Rahn Bay was central and a good backup. Ultimately, Cam Rahn Bay took over the responsibility of Qui Nhon. This was a pivot point. But I must say this: Cam Rahn Bay, as far as a logistics base, is one of the finest I've ever seen.

All-weather roads lead up to the Cam Rahn Bay air field where they brought the C-5s. That was the only place they would put them in for redistribution. The

C-5s only landed at Cam Rahn Bay until the end of the war. The base had an all-weather airport with excellent runways, which were widened to take care of the C-5s. It had five piers, four of which were DeLongs. Pier 3, the old French pier, was the only one that we extended. It consisted of five piers with ten deep-sea berths with a turning radius. Number 5 was the ammunition pier which went right up to the depot. All-weather roads connected five or six shallow-draft berths at the south beach of the port. So we had a really nice place over there. The Mika Bridge, which went over to the mainland where our convoys could go, was unparalleled.

In April of 1969, if I remember correctly, I first took over the 124th Transportation Command, and, again we had problems with organizational structure I think. The 124th Transportation Command was a Terminal Command B Modified, whatever that meant. Looking over the TO&E, I realized that I was authorized seven jeeps and some other vehicle without the proper stevedoring kits, without any of that kind of business. Yet, I had command of the ports at Cam Rahn Bay, which was a huge port. I had Na Trang, which was a port where we deployed and brought in all of the Korean troops and equipment. Phan Rang and Phan Thiet were the pivot points and the ports were the logistic support activity for the entire Southern Task Force under the First Field Forces. So, seven jeeps and a limited staff was great; it taxed my ingenuity. That was a major port, and we needed an organizational structure of a major port to put up with something like that.

CPT Cale: Were you prepared for Vietnam? Were you in World War II and Korea?

MG Del Mar: No, I wasn't in Korea; I was in Austria.

CPT Cale: You were in World War II; how prepared were you for what you saw when you got to Vietnam?

MG Del Mar: Well, when I arrived in Vietnam, I don't think I was prepared at all. I didn't have the slightest idea what we were going to face, and everyday brought a new problem. But, on the other hand, I don't think anybody in the world is ever prepared for combat, especially for the type of action that we went into. So, from my past training in the infantry, I knew that when you're in a foxhole, you never know what's going to happen next -- you have to face whatever happens. I said the same thing about the ships that we have and the trucks that we have. You'll never have the proper equipment designed for the job that you have at hand, so you need to learn to use initiative and be

able to face whatever you have to face. That's the role of the officer and the NCO [Noncommissioned Officers], and the Americans can do it.

We had good commanders and good NCOs in Vietnam; the problem was that we worked under so many inhibitions. I'll never forget that, at Phan Rang, I had a small LSA on the beach trying to take care of everything; and, right over a little knoll where my LSA was, was a temple. Well, you couldn't do anything with temples. The Americans are so easy. We think everybody is like us, that nobody is going to put a machine gun in a church. That's a bunch of bunk. Every time I flew over the place, my troops got mortared by machine gun fire and all of it came from this temple, but then the word comes down not to touch it.

When we go to war, we should remember certain factors. But this will never work because the civilian hierarchy and the political hierarchy control the military. This is the way it should always be. I've never heard of one military officer ever being against this; that's how our freedom is ensured. But, on the other hand, situations should be looked at logically, and rationally developed because, when we're in strange wartime circumstances, the local commanders should be the ones to make the decisions.

In wartime, we should not listen to the media. We're getting to the point that whenever we have one or two casualties, we have to withdraw immediately. That's what war is and anybody who tried to induce morality into war must realize that war is an immoral thing; it's barbaric, and you have got to face whatever you're confronted with. You can't allow yourself to be deluded to by myriad regulations when the enemy has none at all. That may be pontificating, but I feel strongly about that.

CPT Cale: Sir, could you comment on what you feel is the present status of the Army?

MG Del Mar: My perspective may be superficial because I've been out of the forces five years now. Although, in civilian life, I'm still with the transportation industry. I've been Vice-President of Southern Pacific International and President of the National Maritime Council; and I still stay involved enough to see what's evolving in the Army and military. I see certain things that are really progressing.

Let me discuss an example concerning the development of major weapons system. When I first commanded MTMC, it was difficult to convince everybody that the soldier who deploys and is responsible for the stowage and who knows the characteristics of the unit of transportation should be sitting on the board that evolves these pieces of equipment. It's been said many times that you can build it, but if you can't deploy it, it's no good.

I've seen in the last 15 to 20 years of my 35-year career that, regardless of what you build (and you build everything with the utmost precision where deployment is involved), you know the size of it, the weight and all; but, by the time this baby evolves, you've lost all cognizance of it. Everybody modifies it, and it gets bigger and bigger (you know, like the Abrams tank). When I initiated the project, I insisted that I knew what the tank was

going to be; we sat on the boards and so forth. That's when I began the drive to get the money from Congress and the Army-- and so forth to use the new heavy-duty flat cars so that we could put two tanks on a car. From the time of the original specs of the tank to the time that it actually came about was an interesting exercise. It just bothers me that these things happen.

I think that progress is being made because these commanders now sit with the tactical men. The point that I can't overemphasize is that I'm firmly convinced of having played a part in both wars - in one as a tactical soldier in the infantry and in one as a logistician, the importance of logisticians becoming familiar with and having the experience of tactical commanders and tactical situations. They should acquire in-depth knowledge so that they can be shoulder-to-shoulder and understand everything. To me, that is one of the most important accomplishments.

CPT Cale: I agree with you 100 percent on that. What do you think of the Army and its personnel?

MG Del Mar: Well, I think that the Army has evolved into an organization that is now extremely sensitive. Under General John A. Wickam it is extremely sensitive to the personal qualities of personnel, which I think is a breakthrough. I think that's one of the best things that has ever happened. On the other hand, there always has to be (I always play the devil's advocate) a word of caution.

The personal touch (treating people, as you want to be treated) is applicable. A commander is never better than his troops, is never better than his unit. The best commander in the world sometimes can't make anything out of his troops if they don't really have the potential. He can make them better than what they were, but he can also fail successfully. Still, a line of demarcation exists somewhere here.

The thing that worries me (and again, I may be pontificating) is that there are three stages in a man's life. When he's young, he's radical because nothing changes fast enough. When he's middle-aged, he's conservative; he wants to hold on to everything he knows - a security blanket. When he's old, he's a reactionary because everything is changing too fast, and he wants to get back to what he knows. But I have to warn you that, when you deploy and assign personnel, you try and put the right people in the right places. But, if you're going to consider personal desires, and so forth, that complicates the personnel system.

I totally support unit deployment rather than individual replacements. I found a remarkable difference in units when I had them in esprit, knowing each other and working as a team -- the difference is night and day. A logistics, depot, or ordnance unit in which the personnel, who work with electronics, work with the mechanics, and so forth, as a team works extremely well. They put out equipment, quality control is better, and everything is really better because they trust each other, know each other, and know the part they're going to play. With the tactical troops it's much worse - it's a matter of life and death. You get a tank crew that works together and knows what they

are doing far better than anyone else is. So, I think the answer must be that we will always be sensitive to people but never ignore the fact that the main effort and the main objective is the success of the Army in battle. Everything else should be secondary to that. People have pontificated for years over whether you have to be a successful manager vs. a successful leader. In my opinion, every leader, in essence, has the qualifications of some sort of a manager. Some may put emphasis on certain things and a less emphasis on other things, like Patton; but he had some management ability. The leader has to use his resources, especially in combat; he must be dedicated to combat and stress combat vs. logistics. This emphasis on being a manager, that everyone has got to be predominantly a manager, doesn't necessarily mean that everyone is a commander. To be a commander, you've got to inspire troops. Whether you do it by various types of leadership or by other means, you've got to lead and to be the leader. You mustn't tell the soldier, "Hey, do as I say, not as I do." You have to lead them and you can inspire soldiers to accomplish a lot by doing that.

CPT Cale: What about the status of the Transportation Corps -- compared now to how you've seen it -- going from straight 2-1/2-ton trucks to today's wide variety?

MG Del Mar: I think that what I see in the Transportation Corps is really good progress but, again, I'm going to play the devil's advocate because I think that the pendulum swings too far to the right and far to the left. I see these lighter-than-air-cushioned vehicles [LACV], and I look at these mammoth things; but you have to watch to see if I am going into the reactionary stage; but I look at these things, and I see the money they cost. I see what the capabilities are, but I see this versus the maintenance that they're susceptible to because they have to have aircraft engines. I also look and see what type of fuel they use. I think that they're JP-4, or something like that, and that they require a highly explosive aviation fuel. I look at those things, and I see that we always have to have an R&D [Research and Development] going on, and so forth but that must always be an R&D with a certain limit on funds, and so forth.

One thing that worries me is that the Mike-8 boat is still a very good boat, and you can buy I don't know how many of them for the price of the other one. I don't know whether you can sustain it or not. All the equipment coming in the field has such capability - picking up a container on the beach and laying it down. General Aaron L. Lilley, Jr. invited me to the PROLOG [Progress in Logistics] exercises, and I saw all this excellent equipment! The thing that I always consider in the back of my mind is that everything is hydraulic; and hydraulic systems (I don't care what you say) are difficult to maintain out in the field.

You know we're caught in a paradox because we can never face the alleged enemy by quantity. We've got to do it by quality. This makes us reach out to get sophisticated equipment and to get equipment that saves labor and that saves, you know, the tooth-to-tail ratio again. We're forced by that to lessen the tail-to-tooth ratio, and we reach out for all these gargantuas that -- number one, we can't maintain in the field; number two, that puts us back into the contractual arrangements with the civilian commercial

enterprise to bring them into the battlefield. You know, sometimes I wonder if the next bayonet attack is going to be by guys in pin stripes suits that we hired?

CPT Cale: What about logistics as a whole? You mentioned that we needed to have a total system concept; how far away are we from something like that?

MG Del Mar: I really can't answer that, but I think we've made great progress since Vietnam under soldiers like General Richard Thompson of AMC and General Ben Register. When you look at their backgrounds, they may have Quartermaster or Ordnance backgrounds and so forth. Like General Thompson and General Register, whom I've known for years, their backgrounds cover practically every facet of logistics. They've got vast experience and they're not parochial, so they're looking at total systems. Then, all these pieces of equipment come in (you can glibly say what's wrong), but the remedial action is one thing -- to attack because you've got a lot of political pressure on you to get pieces of equipment that you don't want and you don't need. I still say, at the risk of being an archaic old reactionary that I'd rather have had the jeep in World War II and the 2-1/2-ton truck, both of which were very simple to maintain and could do the job. But of this again back to the subject of Cam Rahn Bay, if it weren't for Frank Besson, for instance, our M-52, 5-ton tractor wouldn't have been worth much; and they never really were even in Europe. I had all kinds of problems with the transmissions and, when you got them, they were made strictly for off-the-road mobility. Well, let somebody take them into the fields of Cam Rahn Bay, you could take them off the road and, as you put them into four-wheel drive, they dug right in. I had ammunition spread all over ammunition areas Alpha and Ammunition area Yankee on the South China Sea, and I couldn't haul any ammunition with the M-52s. If it weren't for Frank Besson who got us the Kenworth with the soft tires that they used in the sandy Arabian oil fields, I would have been dead. I had 24 trucks that I kept making parts for, and that's how we'd haul the ammunition. So, again, that's not really a criticism of the logistics system. A lot of times, you end up with equipment that you don't want and don't need because of political pressures.

CPT Cale: Is there anything else you would like to say in concluding this first interview?

MG Del Mar: Well, let me say this: my hindsight has always been much more accurate and sensitive than my foresight, and I think that today's Army has advanced so far. We've made amazing progress in so many ways and in so many things. But I think the emphasis is what I've said, the idiom that I live by, all the time, is the total system. You can't look at things from a fragmented perspective because you only have a modular mentality -- meaning you're only responsible and have authority over a part of that system and not the whole system. You have a moral obligation to the whole system and by taking care of the whole system, regardless of where your responsibility lies -- over what modular portion of that system or what fragment or increment of that system -- you have to ensure that that's in consonance with the entire system from origin to destination, regardless of what it is. Otherwise, you're fouling somebody up, and you're inhibiting the system rather than helping it.

We know that, in wartime, we're not going to have the types of ships that we want and we're not going to have the units of transportation that we want. We've got to make do with what we have. Let me give a typical example of what impresses me. I'll give you an analogy that has really fostered me over the years. The nuclear war is a come-as-you-are war. Using ships would be senseless because the war's going to be over by that time. So we ignore all that. We back ourselves into a corner of a nuclear war that nobody wanted. The only way to rectify that, the only remedial action, is to have conventional forces as an option that can handle the enemy. Whether we're going to get the money for that is beyond me.

We still need the nuclear shield but, because of that, we came up with the McNamara concept to use the C-5s and so forth. We now admit that, with conventional forces, even with the forces that we have in NATO [North Atlantic Treaty Organization] today, I don't think that we could support them with the merchant marine that we have today. I don't care how many ships the Navy gets in its readiness fleet. They're building from 77 to 100 [ships]. It's infinitesimal. Look at the Falkland Islands. They had 100 ships, I think, for a brigade of 7000 people, and they never got engaged in a really heavy ground war. We have to supply NATO, and we say we can only do it by surface.

When you look at the expenditures of material and ammunition on a modern battlefield, you're just absolutely amazed at what it takes to keep an Army. What does it take to support a 100,000-ton armored division per day? Vast amounts. Yet we go back, and our merchant marine says, "Well, we're going to do something about that." The Navy is going to buy some ships. Well, the Navy has more fighting ships than it has support ships.

When I was in the Joints Chief of Staff, whenever we had an exercise, we always found that the thing that made us go wrong was that the Navy prolonged ships that you were going to use for general support, since they were under the Navy. So here we are. Consider surface ships. One container ship is equivalent to about five squadrons of C-5s. By the way, I proved that in the Yom Kippur War. The first ship that we hit, we hit less than 30 days into the Israeli port, and it carried 7,000 tons of ammunition, which is equivalent to how many C-5s? You know, you bring C-5s in with ammunition. They brought in a 747 full of ammunition - antitank ammunition - which you can go through in twenty minutes on the battlefields. So you have to have surface supplies even though you need air, which is flexible. But, although we say that we've got to have surface support to cope with the quantities that we have, what do we do in action?

Look at the logistics support of the Air Force. They have ninety-nine percent of the money in C-5s and everything else and one percent of the money in surface lift. So you know the actions and the rebocity are never correlated. Not that I'm against C-5s. You need them. But, you know, we always say a C-5 can bring two tanks into the combat area. Maybe so -- what do you do? Tell the enemy to wait until you get a combat command together? Then how do you supply them? The petroleum itself is a deal. In the Yom Kippur War, for each ton that we put in by air, we took out 6 tons of fuel for those babies. That's what I'm saying. I'm saying all this has got to be looked at. It

shouldn't be the service with the greatest political rapport. We ought to look at the total system. Those are my last pontificating words.