I ask unanimous consent that, during the Senate's consideration of the transportation appropriations bill, the following amendments be the only first-degree amendments in order, subject to second-degree amendments which must be relevant to the first-degree they propose to amend, with the exception of the antiterrorism amendments, on which there will be 1-hour notification of the two leaders prior to the offering of any amendment regarding terrorism, and they be subject to second-degree amendments which must deal with the subject of terrorism.

The amendments are follows: Two relevant amendments by Senator LOTT; one relevant amendment by Senator McCain; Cohen-Snowe, truck weight limitations; Gramm, highways; LOTT, six amendments regarding terrorism; McConnell, bridge amendment for Kentucky; Hatfield, relevant amendment

For the information of all Senators, any votes ordered this evening will be stacked in a sequence beginning immediately following passage of S. 1936, with the first vote and all remaining votes in the voting sequence limited to 10 minutes only, and those votes will be ordered on a case-by-case basis. In light of this agreement on behalf of the majority leader, there will be no further votes this evening.

Mr. President, I want to amend what I said. I forgot to read the Democratic list of amendments that will be rel-

evant and in order.

A Baucus amendment on highway obligation; five antiterrorism amendments by Senator BIDEN; a Bradley amendment on rail safety/newborns; BYRD, two relevant amendments; DASCHLE, two relevant amendments; DODD, an FMLA2 amendment; DORGAN, runaway plants and a relevant amendment; LAUTENBERG, two relevant amendments: Reid. relevant one WYDEN, one amendment; relevant amendment, and WELLSTONE, one relevant amendment.

The PRESIDING OFFICER. Without

objection, it is so ordered.

Mr. HATFIELD. Mr. President, I believe we have run the limit of our activity for the evening. As I indicated, by a leadership agreement, there will be no further votes this evening.

I suggest the absence of a quorum. The PRESIDING OFFICER. The

clerk will call the roll.

The legislative clerk proceeded to

call the roll.

Mr. GRASSLEY. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without

objection, it is so ordered.

Mr. GRASSLEY. Mr. President, I ask unanimous consent to speak as in morning business.

The PRESIDING OFFICER. Without objection, it is so ordered.

MARINE CORPS GENERALS

Mr. GRASSLEY. Mr. President, I have just received a letter from the

Commandant of the Marine Corps, Gen. C.C. Kruluk.

General Kruluk's letter concerns the Marine Corps' request for 12 additional general officers.

His letter responds to a letter which I sent to the House conferees on the fiscal year 1997 Defense authorization bill.

My letter urged the House conferees to hang tough and block the Senate proposal to give the Marine Corps 12 more generals.

The Senate approved the Marine Corps's request. But the House remains opposed to it.

So the request for 12 additional generals is a bone of contention in the conference

Mr. President, I ask unanimous consent that my letter to the conferees and the Commandant's response to it be printed in the RECORD.

There being no objection, the letters were ordered to be printed in the RECORD, as follows:

JULY 29, 1996.

Hon. CHARLES E. GRASSLEY: U.S. Senate, Washington, DC.

DEAR SENATOR GRASSLEY: I have been provided a copy of the letter you sent to House Conferees concerning the proposal in the Senate Authorization Bill that would give the Marine Corps twelve additional general officers. While this responds to the issues raised in your letter, it has been my desire to meet with you in person to discuss this issue. I understand our staffs have finally worked out a time to do so, and I look forward to meeting with you on Wednesday.

Those familiar with the Corps know that we pride ourselves in squeezing the most out of every dollar that you entrust to your Marine Corps. The also know that we don't ask for something unless it is truly needed.

The main thrust of your letter is that the number of general officers should be reduced consistent with force structure reductions. Reduction in end strength does not necessarily have a one-to-one correlation with command billet reduction. Permit me to explain. As you have correctly stated, the Marine Corps in 1988 had a total active duty end strength of approximately 198,000, with a general officer population of 70. Today, we have an end strength of 174,000, and a general officer population of 68. That said, please note that the 82nd Congress mandated in Title X that our Corps of Marines be "so organized as to include not less than three combat divisions and three air wings, -as it was in 1987, it is so organized today. This point is key: While the Marine Corps has reduced its end strength by 24,000 personnel, its three division, three wing structure has remained essentially unchanged. Those familiar with the military know that the requirement for general/flag officers is tied directly to the number of combat divisions and air wings-and that number has not been reduced. Of the 70 Marine general officers in 1987, 11 were assigned to joint/external billets. Today, 16 of the 68 Marine general officers are serving in joint/external billets. Today we have 52 general officers manning essentially the same structure that was manned by 59 general officers in 1988.

Throughout our history, we Marines have prided ourselves in doing more with less. In the past, we have compensated for our general officer shortfall by "frocking" officers selected for the next higher grade to fill that position without the pay. While that practice has its own drawbacks, it did provide us

with the requisite number of general officers to fill critical shortfalls. Last year, the Senate set increasingly strict limits on the number of general officers that the Services may frock. And I understand their rationale—the practice of frocking simply makes deficiencies in Service grade/billet structure. These shortages are indeed better addressed with permanent fixes rather than the stopgap measures such as frocking. This restriction on frocking, however, has placed the Marine Corps in an untenable position. Losing six of our nine frocking authorizations means that we would now have 46 general officers manning essentially the same structure that was manned by 60 general officers in 1987. This makes it critical that we have additional general officer allotments.

In response to your remark that we are "simply trying to keep up with the Joneses" let me offer this: Other Service ratios of general officer to end strength range from one general/flag officer for 1,945 troops to one general/flag officer to 1,435 troops. Excluding the Marine Corps, the Service-wide nominal ratio of one general per 1,620 troops would give the Marine Corps a minimum of 104 general officers. The twelve additional officers that the SASC has provided would give us a total of only 80—hardly keeping up with the Joneses!

Finally, this is a matter of providing quality, experienced leadership for our Marines. We are the nation's force in readiness, standing by to go into harm's way to protect U.S. interests globally. Providing these brave Americans with an adequate number of commanders and representation in the joint arena is not just prudent—it is the right

thing to do.

Senator Grassley, I am convinced that these additional general officer billets serve the best interest of our Services and our national defense. I am also convinced that the solution is not to bring the other Services down to our untenable position, but rather to grant us the minimal increase we need to properly perform those functions Congress has mandated and our nation expects. Our meeting on Wednesday afternoon should be productive—I am looking forward to an honest and open dialogue. Semper Fidelis!

Very respectfully,

C.C. Krulak, Commandant of the Marine Corps.

U.S. SENATE,

Washington, DC, July 24, 1996.

DEAR HOUSE CONFEREE: I am writing to encourage you to hang tough and do everything possible to block the Senate proposal that would give the Marine Corps 12 additional general officers.

The Senate argues that these additional Marine generals are needed to two reasons: (1) to fill vacant warfighting positions; and (2) to meet the requirements of the joint warfighting area mandated by the Goldwater-Nichols Act.

These arguments are nothing but a smoke screen for getting more generals to fill fat headquarters jobs.

In 1990, your Committee took a very straightforward, common sense approach to the question of how many general officers were really needed. Your Committee could see the handwriting on the wall. The military was beginning to downsize in earnest. As the force structure shrinks, your Committee said the number of general and flag officers should be reduced. New general officer active duty strength ceilings were established. The total number authorized had been set at 1,073 since October 1, 1980. The FY 1991 legislation reduced that number to 1,030 in 1991, including 68 for the Marine Corps. However, based on the projected 25% reduction in the force structure between 1991 and

1995, which in fact occurred, the number of general officers authorized to be on active duty was lowered to 858 by October 1, 1995, including 61 for the Marine Corps.

This is how your Committee explained the decision to cut the number of generals in 1990 (Report 101-665, page 268):

"The Committee believes that the general and flag officer authorized strengths should be reduced to a level consistent with the active force structure reductions expected by fiscal year 1995."

The Senate Armed Services Committee report contained identical language (Report 101–384, page 159). But the Senate committee linked the need for fewer generals directly to a projected 25% reduction in the force structure. In addition, it provided a more detailed justification for the lower ceilings as follows:

"The committee believes that these ceilings should assist the military services in making critical decisions regarding the reduction, consolidation, and elimination of duplicative headquarters. The ceilings should also assist the military services in eliminating unnecessary layering in the staff patterns of general and flag officer positions."

In reviewing your Committee's justification for lowering the general officer ceilings, there is no mention of the need to fill vacant warfighting positions—even though the Gulf War was looming on the horizon. And there was no mention of the need to fill joint billets mandated by Goldwater-Nichols.

Your Committee gave only one reason—the right reason—for reducing the number of general officers in 1990: The number of general officers should be reduced consistent with projected force structure reductions.

So what has changed since that legislation was adopted six years ago? Why has the Marine Corps fabricated a new rationale for more generals? Nothing has changed. DOD is continuing to downsize, and according to recent testimony by Secretary Perry, that process is expected to continue into the future (refer to page 254 of his Annual Report to Congress). Your guiding principle still applies: As the force structure shrinks, we need fewer general officers. It was valid then. It's still valid today.

So why is the Marine Corps trying to topsize when its downsizing? There is no reasonable explanation for giving the Marine Corps 12 extra generals. The extra 12 generals requested this year comes on top of an extra 7 Marine generals authorized just two years ago in special relief legislation.

In my mind, the issue boils down to one indefensible point: the Marine Corps is trying to keep up with the Joneses. This is a war over stars. The Marine Corps wants to have as many generals per capita as the other services. This is not the right way to resolve the problem. There is a better way. You should fix it in exactly the same way your Committee fixed it in 1990. You should fix it by giving each service the right number of generals—a number that matches the force structure.

I hope that reason prevails on this issue. At a minimum, I think the decision on the extra 12 Marine generals should be delayed until the Inspector General has conducted an independent review of all Department of Defense headquarters, commands, and general officer billets and determined exactly what is necessary based on real military requirements.

Sincerely,

CHARLES E. GRASSLEY,

U.S. Senator.

Mr. GRASSLEY. Mr. President, I would like to respond to General Krulak's letter.

This is the main point in his letter, and I quote General Krulak's own words:

The main thrust of your letter is that the number of general officers should be reduced consistent with force structure reductions.

This is General Krulak talking:

The reduction in end strength does not necessarily have a one-to-one correlation with command billet reduction.

He goes on to say:

This point is key: While the Marine Corps has reduced its end strength by 24,000 personnel, its three division, three wing structure has remained essentially unchanged. Those familiar with the military know that the requirement for general/flag officers is tied directly to the number of combat divisions and air wings—and that number has not been changed.

Mr. President, I would like to respond to General Krulak.

First, the suggestion that the number of generals should be reduced consistent with force structure reductions is not a rule dreamed up by the Senator from Iowa.

The rule was first put forward by the Senate Armed Services Committee years ago.

It has been expressed by the House Armed Services Committee.

It was the guiding principle used in formulating current law.

It is still in current law—section 526 of title 10, United States Code.

That law places a ceiling on the number of generals and admirals allowed on active duty.

This is the rule behind the law:

As the force structure shrinks, the number of generals and admirals should come down.

If the force structure expands, then the number of generals and admirals should go up.

That simple, commonsense logic has guided military planners since time began.

Second, General Krulak agrees that end strength has fallen.

However, he contends that the Marine Corps' combat force remains essentially unchanged.

Let's briefly review the facts.

In fiscal year 1987, Marine end strength was 199,525, including 70 generals.

Today, the fiscal year 1996, there are 172,434 marines, including 68 generals.

While end strength is down and two generals are gone, the Marine Corps still has three divisions and three airwings.

General Krulak is right about that. The force structure is intact.

Unfortunately, it's not whole. Some troops are missing.

The end strength is down by 27,091 Marines.

If the structure is still there, but some people are gone, that's a hollow force, isn't it?

Mr. President, is another hollow force creeping out of the Pentagon fog?

Mr. President, on July 17, I placed a Marine Corps briefing paper in the RECORD, page S7986.

That paper was entitled "Making the Corps Fit To Fight." It was dated April 1996.

This is what it says:

Marine infantry battalions are at 57 percent of authorized requirements for platoon sergeants.

If that's true, then the Marine Corps structure is already getting hollow.

A Marine platoon can't function without a good sergeant.

Mr. President, do we need more generals to lead a hollow force?

Clearly, a hollow force doesn't demand more generals. Nor does a static force demand more generals.

Only a bigger force demands more generals, and that isn't in the cards right now.

Third, General Krulak introduces another argument to justify his request for more generals.

This one is designed to de-couple the issue from the force structure. This is how he tries to undo the logic.

He says he needs 12 more generals to fill joint billets mandated by the Goldwater-Nichols Act of 1986.

It's a distortion to suggest that Goldwater-Nichols mandates more generals when the force structure is shrinking.

Joint billets—just like service billets—should be squeezed as the force structure shrinks.

This is the message hammered home by Marine Gen. John Sheehan:

"Headquarters and defense agencies should not be growing as the force shrinks."

That's General Sheehan, commander in chief of the U.S. Atlantic Command.

All the data points indicate that downsizing is continuing and will continue for the foreseeable future.

So the argument that more generals are needed to fill joint billets doesn't hold much water, either.

A few years back, the Marine Corps had another commandant. His name was Al Gray.

He was tough as nails. He was known as a mud marine.

He didn't look at the Marine Corps' needs like a bureaucrat would. He looked at it like a Marine—from the bottom up, starting with platoons and companies.

In a December 1987 interview with the Chicago Tribune, General Gray talked about his plans to fill his units with people from the bottom up. I quote:

'If the Marines fill their need for officers and troops before they get to the big head-quarters in Washington,' he said with a grin, 'that might be a blessing in disguise.'

Mr. President, I ask unanimous consent that this interview be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[From the Chicago Tribune, Dec. 13, 1987] MARINES: MYTH VERSUS REALITY MODERN CORPS IS BIG, COSTLY, HEAVY ON SUPPORTING CAST

(By David Evans)

WASHINGTON—The Marines have a new commandant, Gen. Alfred Gray, a veteran of

the Korean and Vietnam Wars. He's characterized by marines who know him as a selftaught thinker and a "warrior's warrior.

He inherits not one, but two Marine Corps. One is the corps of myth: small, cheap, and mostly fighters. A Marine Corps, if you will, designed to kick down the door of a defended coastline and put a lot of grunts on the beach in a hurry and looking for a fight.

Then there's the real Marine Corps: big, expensive, and with relatively few fighters but a big supporting cast. This real corps plans to land ashore where the enemy isn't

Al Gray isn't very happy with this real

"We're going to make some changes," he growls. "It's time for a fresh, simple look." People are not his problem. Today's young

marines are the highest quality ever, by any measure. They're enough to make a hardboiled commander's eyes water with joy.

The real problems are deeper, and structural. They have to do with the rising cost of the Marines, a tail-wagging-the-dog support structure that pulls marines out of fighting units, and a new-found addiction to costly exotic equipment.

Gray is already grousing about some of these problems.

'Americans expect their Marine Corps to put fully manned infantry battalions into the field," he said in a recent interview, "not units missing 100 or more troops.

That's an unusual admission from the man in charge of a corps of 20,000 officers and 180 000 enlisted marines But over the years the corps bought equipment that took more people to maintain and repair, and it created more and larger headquarters units. These competing demands for manpower, in secondary support and headquarters activities, siphoned marines out of the fighting units.

The slogans remain—"Every marine is a rifleman"—and ringing speeches are still made about the infantryman as the corps' ultimate weapon. But in the real Marine Corps, the infantryman is steadily becoming an endangered species. Of the 180,000 enlisted marines, about 33,000 are officially designated as infantrymen.

Throw in the artillerymen, tank crews and combat engineers, and the total number of enlistees in the "combat arms" amounts to barely 51,000. Instead of closing with and destroying the enemy, the traditional role of marine fighting men, nearly three out of four enlisted marines are now doing something else; repairing equipment, hanging bombs on airplanes, driving trucks.

In this respect, the Marine Corps looks very much like the U.S. Army, where three out of four active-duty soldiers are in sup-

port functions, too.

Mark Cancian, a Marine Reserve major, sums up recent trends with this observation: If the corps' structure of 1962 were in place today, a structure that featured larger infantry battalions and less logistics support, "there would be 17,000 more marines in Marine divisions—one entire division's worth.'

"Another insight," says Cancian, "is to look at the number of 'trigger pullers' in the division.'

These are the marines who personally deliver fire on the enemy: the riflemen, artillery cannoneers, tank crews. Everybody else is helping to coordinate and support that fire, but the number of trigger pullers amounts to barely 7,500 in a division of 17,500 enlisted marines.

There are barely 22,500 "trigger pullers" in all three active divisions. Add a few hundred pilots flying close air support, say 500, and there are perhaps 23,000 marines in a corps of 200,000 whose primary duty is to personally fire on the enemy.

Most of these "trigger pullers" are found

in the 27 infantry battalions that represent

the cutting edge of the corps. Those battalions may be short the infantrymen they need, but they have plenty of headquarters over them: 29 regimental and higher level headquarters, in fact.

If the Marines have grown top-heavy with headquarters units, they've also become harder to move. Too heavy for easy deployment, despite Gen. Robert Barrow's warning as commandant in 1980 that the corps 'should be light enough to get there, and heavy enough to win.'

Artillery is an instructive example. The Marines "heavied up" their artillery from 105 mm. to 155 mm. howitzers, in part because the Army was shifting to heavier artillery, and in part because of the long range of Soviet guns. But the new howitzer has to be disconnected from the truck that pulls it before being loaded into the standard mediumsize landing craft. And the truck doesn't have enough power to pull the gun through sand, so a forklift has to be waiting on the beach to pull the gun ashore.

Air units are more difficult to move, too. The Marines are replacing their aging F-4 fighters with new F-18s. According to the maintenance officer of a fighter group of 60 aircraft, the number of maintenance vans that must accompany the same number of F-18s went up 72 percent, from 150 vans to 260.

The Marines have become so heavy that the supplies for a full-up amphibious force of 50,000 marines fill about 6,800 containers, each as big as a small bus. Landed ashore, the containers blanket a huge area.

"About 22 acres of nothing but boxes," says a colonel, who asks: "Can we afford a

target that large?"

Amphibious operations by their very nature require bulldozers and other heavy equipment," explains Lt. Col. Ken Estes, a staff officer at Marine headquarters.

All those support marines, the heavier equipment and the stacks of supplies cost more money. An E-3 lance corporal in an infantry squad costs \$15,600 a year in pay and benefits: and E-6 staff sergeant clerking in a headquarters unit costs \$22,800.

The new truck carries the same 5-ton load as the vintage model it replaces, but costs \$31,000 more (in constant 1986 dollars.)

Heavier artillery shells for the new howitzer cost 160 percent more.

These are just a few examples of the thousand different ways the corps' appetite for money has ratcheted steadily upward.

The Marines are no longer the K mart of national defense; they are smack in the mainstream of an upscale defense establishment where costs are rounded to the nearest tenth of a billion dollars.

The corps' annual budget now hovers at \$9 billion. Since the Navy buys airplanes for the Marines out of its "blue dollar" budget, the real cost of the corps runs closer to \$13.7 billion a year, according to Pentagon budget

Even the Marines may not realize how expensive they have become. In 1976 the total cost of equipping, paying and training each marine was about \$37,000. That's in equivalent 1987 dollars. Since then, the per capital cost has rocketed to \$68,000 for each marine—a stunning 83 percent increase. Part of that jump is the extra pay for more experienced marines, with the rest driven by the rising price of equipment and operations

The cost is still less than the \$104,000 the Army spends for every soldier, but the difference is narrowing, and fast.

If the taxpayers cannot afford the moneyrich diet to which the Marines have grown accustomed, the Navy can't, either, least it can't afford enough of the kind of highly specialized amphibious ships the Marines want.

The biggest new class of amphibious ships, for example, costs more than \$1 billion and

figures prominently in the planned expansion of the amphibious fleet from 62 to 76 vessels.

The Marines have rejected cheaper ships as a solution to the numbers problem. One design concept, known in the pentagon by the codeword LTAX, would have provided the same carrying capacity as the large amphibious ships now under construction, but at one-fourth their billion-dollar cost.

"LTAX didn't have the built-in survivability or creature comforts," admits a Pentagon naval expert, "but it would have provided a way of complementing the limited number of true amphibious ships we can af-

If the Marines have erred by growing too heavy for easy deployment, they've also strayed from Gen. Barrow's timeless dictum by not being heavy enough in the right areas to win. In antitank combat, for example, the Marines' problem is more than serious-it is critical.

With the exception of the TOW missile, the Marines' infantry antitank weapons are not up to the job, according to a recent General Accounting Office report on antitank weapons. The warhead on the shoulder-launch AT-4 antitank rocket is too small for assured frontal kills against attacking Soviet tanks. Critics, including some marines, call the AT-4 "the paint scratcher."

Worse, the Marines probably are not buying enough TOWs. Their planned consumption rate in combat is one TOW missile per

launcher every two days.

The Marines have had the Dragon mediumweight antitank missile for a decade, but its accuracy and punch are dismal. In combat, the GAO estimates the Dragon may hit the target only 8 out of 100 shots. Although the corps is upgrading the Dragon with a new warhead and sight, it will be years before the new weapons are in the hands of troops.

Moreover, the new warhead adds 2½ pounds to the missile's weight, which skeptics claim will reduce the Dragon's range. The first block of "improved" missiles may be less accurate, because the pulse rockets used for guidance corrections will be used up faster to counteract the added weight.

Maj. Gen. Ray Franklin, in charge of the Dragon improvement project, claims initial warhead tests are "very impressive." He's hoping to field 15,000 new missiles for \$60 million

Other experts aren't so sure.

"They're getting super performance from prototype warheads," says an ammunition says an ammunition "and they're having nothing but problems trying to produce them in quan-

He believes the Dragon costs "are going to go out of sight" even if the production problems are solved, and Franklin won't get nearly what he hopes for the money.

If Marines on the ground aren't equipped to kill tanks, they'll need air support to do the job.

At enormous expense-\$5 billion-the Marines have equipped five squadrons with British-designed AV-8B Harrier close air support jets. The Harrier doesn't have the right weapon for killing tanks, say a number of weapons experts familiar with its performance in live-fire tests.

The Harrier's 25 mm, cannon was tested extensively against tanks at Nellis Air Force Base in 1979. In 24 passes, the Harrier fired hundreds of shells, getting plenty of hits but not a single kill. Reportedly all but seven of the shells bounced off the tanks' armor. Test reports reveal the Air Force's 30 mm. cannon did much better, killing tanks in 60 percent of the firing passes.

Tom Amlie, a Pentagon weapons expert, says the Harrier's 25 mm. gun "is too heavy for light work [shooting up trucks], and it's too light for the heavy work of killing tanks.

It may be suicidal for Harrier pilots to press their attacks to gun range, anyway. There isn't an ounce of armor on the Harrier. and its engine is wrapped in fuel tanks. A Naval Air Systems Command briefing reveals the Harrier is 10 times more vulnerable to ground fire, given a hit, than the Marines' F-18 fighter, and 20 times more vulnerable than the Navy's A-7 attack jet

Instead of flying Harriers into the teeth of the thousands of automatic weapons found in a Soviet motorized rifle division, the preferred method is to employ so-called "standweapons. These are missiles or bombs that can be guided to their targets from outside the range of enemy weapons.

"That's why they're ga-ga for laser-guided Maverick missiles," concludes E.C. Myers, former director of air warfare in the Penta-

The Maverick is tricky to use against tanks, however. Of 100 Harrier test runs against tank targets in 1985, the Center for Naval Analysis found the pilots were successful in finding, locking-on and firing only 6 percent of the time.

The Marines could use their F-18 fighters armed with Rockeye cluster bombs against Because the Rockeye spreads bomblets over a wide area, it cannot be employed close to front-line marines. Even so, it is not a very effective weapon. Defense Department munitions effectiveness manuals indicate that four Rockeyes have less than 50 percent chance of killing one tank.

The real Marine Corps, it seems, is illequipped, both on the ground and in the air, to defeat massed tank attacks. And this kind of attack is the Sunday punch of the Soviet army and Third World armies equipped with

Soviet weapons.

We're not pleased with what we have for air work against tanks," admits Maj. Gen. Charles Pitman, the assistant chief of Marine aviation. He hopes improved Mavericks will solve the problem.

Perhaps the biggest problem is whether the country can afford the Marines' ambitious

plans for the future.

The Marines are touting a new landing concept.

terattack

"We have to come from over the horizon," says Gen. Gray, to avoid exposing the amphibious fleet to shore-based antiship mis-

But new equipment is needed to carry troops and equipment the greater distance to the beach. One is a hovercraft called LCAC (for Landing Craft Air Cushion,) which can 'fly" over underwater and beach obstacles.

The Marines also say they need a new kind of aircraft called the MV-22 tilt-rotor. The MV-22 will take off like a helicopter and fly like an airplane, tilting its engines to again land like a helicopter. The new tilt-rotor would be used land marines as far as 25 miles inland.

Freed of traditional beach landing restrictions, the Marines say they can threaten a much wider coastline. The enemy commander, accordingly, will be forced to choose between spreading his forces or leaving large

areas undefended.

The Marines plan to exploit either choice by punching through a weak and overextended cordon defense, or by landing at undefended spots to quickly build up forces ashore, before the enemy can move and coun-

'If we're going to land where the enemy isn't.'' observes one colonel who's skeptical of the new concept, "why bother staying way offshore, over the horizon? We have enough trouble landing at the right spot from 4,000 yards offshore.

'For the actual landing,' he says, "we've moved the mother ships from 4,000 yards offshore to 25 miles. We've increased the distance more than 12 times, but the hovercraft is only 5 times faster. We're worse off.

The speed advantage of the tilt rotor over current helicopters may be illusory, too. Three out of four tilt-rotor helicopters making the 50-mile trip from ship to inland landing zones will be toting loads that are too big and heavy to be carried inside. They'll be slung underneath, and some pilots say these 'external'' loads will reduce the tilt-rotor's speed further.

The experimental tilt-rotor now flying has never carried an external load.

Ultimately, the marines must use beaches accessible by conventional landing boats anyway. The new hovercraft and tilt-rotor aircraft will carry ashore only 12 percent of the troops, 6 percent of the vehicles and twotenths of 1 percent of the ammunition and supplies. Everything else will have to be moved ashore in conventional landing craft, which will be restricted to the 17 percent of the world's coastlines where the water and beach conditions are suitable.

'The enemy will know the entry points on his own coastline that lead to meaningful objectives," says a former Defense Department official who questions the new landing concept. "That's where he's going to defend, and that's the ground the marines will have to

"We delude ourselves by retaining the 'assault' label,'' says Col. Gordon Batchellor, a highly regarded tactician, "as we quietly build a scenario where movement, but no assault, occurs.'

This force structure, he maintains, "will be useless when a true assault is called for.'

The new landing concept is expensive. Each air-cushioned hovercraft costs \$20 million and can carry a single 70-ton tank ashore. For the same money, the Navy could buy four heavy "utility" size landing craft, called LCUs, each of which carries 175 tons.

A study by the House Armed Services Committee concluded the tilt-rotor aircraft will cost more than \$35 million apiece; the CH-53E helicopter, which can carry twice the payload, costs \$16 million. The extra speed and range being built into the tilt-rotor make up \$15 billion of the total \$25 billion cost of this program.

The Marines are buying into a number of hugely expensive and technically risky programs like the tilt-rotor. With these systems, they can range up and down enemy coastlines, jabbing here and there, but the Marines may well be giving up the capability to deliver the body blows of serious war fighting.

Gen. George Patton, no stranger to amphibious operations, once said: can outmaneuver an eagle, but he is not feared. Speed and mobility not linked with fighting capacity are valueless. Wars are won by killing.

Yet it seems the sparrow is the Marine Corps look for the future.

This situation may be perfect for Al Gray. After all, the warrior is the man of bold decision in the face of adversity, and Gray, as 'peacetime warrior,'' is facing monumental problems. His budget is a fiscal Mt. St. Helens, unable to contain the explosive pressures of bills now coming due for costly programs started years ago.

''I don't believe in watering down our requirements," he says, but he's also sending out strong signals that some requirements may be revised. "We're going to look from the bottom up," he says, at the entire Marine Corps, "starting with platoons and companies.

Gray plans to fill the units with people from the bottom up, too. If the Marines fill their need for officers and troops before they get to their big headquarters in Washington, he grins, "that might be a blessing in disguise.'

He wants to move with breath-taking speed, bringing all the infantry battalions up to full strength by next summer, adding a fourth rifle company to each battalion as well. Those two actions will put almost 6,000 infantrymen back into the cutting edge.

'We're going back to everybody being an infantryman, too," Gray promises. And he wants extra combat training for all marines, regardless of speciality. "The way we used to do it," he adds.

What else can he do? A number of civilian experts and Marine officers concerned about the future of the corps suggest a few basic

Eliminating unnecessary staffs is near the top of the list. More than half of them are not needed under the most demanding Pentagon plan for the Marine Corps, which calls for the simultaneous employment of an amphibious force and four brigades. Those commitments require only 13 of the 29 regimental and higher-level staffs the Marines now have, leaving 16 of them unemployed.

At one stroke, Gray could cut the headquarters overhead by 55 percent, saving millions of dollars in manpower costs that could be applied elsewhere.

With a quick trip to Europe. Grav can get the weapons that marine infantrymen need to kill tanks. European antitank weapons are generally heavier than their American equivalents, largely because they have bigger warheads. The West Europeans, who live much closer to those 50,000 Soviet tanks, build weapons to kill them.

The Marines don't have to wait years for an improved Dragon, which still exists largely as a "paper" design. The West German Panzerfaust III and the French Apilas, two shoulder-launched rockets now in production, are good for short-range work. For longer-range antitank engagements, the Milan missile, combat-proven in Chad, is

The Marines could buy 30 mm, gun pods to strap onto their close support aircraft.

"The gun is the only way to kill tanks in close," says Rep. Denny Smith (R., Ore.), who is prepared to help Gray get the pods. close,' They're cheap at roughly \$300,000 each.

For the price of half the Maverick missiles the Marines want to buy, they could buy 30 mm. gun pods for every jet aircraft in the corps. And they'd still have three times the 800 Mavericks they now possess.

Among the corps' friends and critics, there is a nearly universal belief that the Marines have lost focus. Instead of concentrating on the basics, says Smith, "they're trying to capture hardware programs for a bigger budget share.'

A number of Pentagon officials, who prefer to remain anonymous, echo those sentiments, citing the "over-the-horizon" landing concept as little more than a technical scenario for justifying expensive new programs like the hovercraft and the tilt-rotor.

The concept that epitomizes what may be the most important problem Gray inherits: the pervasive failure to separate tactical needs from technical wants.

Tactically, the Marines needed a close air support aircraft. Technically, they lusted for the Harrier, a jet that could take off and land vertically. Now, they've got the most vulnerable close air support airplane in the world.

Tactically, the Marines needed lots of landing craft to get to the beach. Technically, they coveted the air-cushion hovercraft, which is quite literally a "helicopter with the roof off." Now they've sacrificed the build-up rate ashore.

Gray appears to be sensitive to these problems. While he remains outwardly committed to the Harrier and the tilt-rotor program, he worries about the pervasive fascination at the staff level with "programmatic forces" instead of real "fighting forces"

However, Gray is also sending out mixed signals to the working level marines who have to translate his reformist zeal into detailed plans and budgets. For example, he wants to buy an assault gun, a form of light tank, which resurrects a weapon that failed miserably in World War II.

When the Marines start sorting out their must-have tactical needs from nice-to-have technical wants, they're likely to discover a lot they can do without.

They just might figure out a way to produce a Marine Corps the country can afford

If Gray is successful in making the real, the heavy and expensive corps more like the lean, tough, deployable Marine Corps of myth, the Marines will be restored to what he calls "real preparedness."

"Anybody can have a bag full of numbers to look good," he says. "We're going to make sure we have the right people and organizations for combat

Mr. GRASSLEY. If General Krulak would look from the bottom up, instead of the top down, he would quickly realize that sergeants and lieutenants are needed more than generals.

Mr. President, I will be meeting with General Krulak in the near future to discuss this issue.

I hope we both come away from this meeting with a fresh perspective on what the Marine Corps really needs right now.

Mr. BIDEN addressed the Chair.

The PRESIDING OFFICER. The Senator from Delaware.

DECISION BY THE FIRST CIRCUIT COURT OF APPEALS

Mr. BIDEN. Mr. President, I rise this evening to discuss a decision handed down by the First Circuit Court of Appeals, and I will be introducing a bill to correct what I think was a serious mistake the court made.

Mr. President, let me briefly discuss the court's decision. A few months ago, the First Circuit Court of Appeals made, in my view, a serious mistake—a very big mistake. It said that the term "serious bodily injury," a phrase used in one of our Federal statutes, does not include the crime of rape.

Mr. President, let me tell you about this case. One night near midnight, a woman went to her car after work. While she was getting something out of the back seat of her car, a man came up behind her with a knife and forced her into the back seat of her own car. He drove her to a remote beach, ordered her to take off her clothes, made here squat down on her hands and knees, and he raped her. He raped her. After the rape, he drove off in her car, leaving her alone on the side of the road naked.

This man was convicted under the Federal carjacking statute. That statute provides for an enhanced sentence of up to 25 years if the convicted person

inflicts serious—the term of art—serious bodily injury.

If he inflicts serious bodily injury in the course of the carjacking, the statute provides for an enhanced sentence, a longer sentence, of up to 25 years.

When this case got to the sentencing phase, after the defendant had been convicted of raping the woman in the manner that I just pointed out, the prosecutor asked the court to enhance the sentence, because under the statute if serious bodily injury occurred, then an additional 25 years was warranted. And the prosecutor reasoned, as I do, that rape constituted serious bodily injury.

The trial judge agreed with the prosecutor and gave the defendant the statutory 25-year maximum, finding that rape constituted serious bodily injury. But when the case went up to the First Circuit Court of Appeals, that court said no. It said, if you can believe it, that rape is not serious bodily injury.

Mr. President, I have spent the bulk of my professional career as a U.S. Senator and prior to that as a lawyer making the case that we do not take seriously enough in this country the crime of rape, and until we do we are not going to be the society we say we wish to be and we are not going to impact upon the injury inflicted on women in this society.

But the Circuit Court of Appeals ruled that rape does not constitute serious bodily injury under our statute. To support its ruling—and I am now quoting the opinion of the First Circuit Court of Appeals—the court said: "There is no evidence of any cuts or bruises in her vaginal area."

I apologize for being so graphic, but that is literally a quote from the court ruling. That, in my view, is absolutely outrageous.

Senator HATCH and I and Congressman CONYERS in the House are going to be offering a bill to set matters straight. Under the U.S. Criminal Code, serious bodily injury has several definitions. It includes a substantial risk of death, protracted and obvious disfigurement, protracted loss or impairment of a bodily part or mental faculty, and it also includes extreme physical pain. It takes no great leap of logic to see that a rape involves extreme physical pain. And I would go so far as to say that only a panel of male judges could fail to make that leap and even think, let alone rule, that rape does not involve extreme pain.

Rape is one of the most brutal and serious crimes any woman can experience. It is a violation of the first order, but it has all too often been treated like a second-class crime. According to a report I issued a few years ago, a robber is 30 percent more likely to be convicted than a rapist. A rape prosecution is more than twice as likely as murder prosecutions to be dismissed. A convicted rapist—and I want to get this straight—is 50 percent more likely to receive probation than a convicted robber. And you tell me that we take

this crime we say is one of the most heinous crimes that can be committed by one human being on another seriously?

Look at those statistics. We treat robbery—robbery—more seriously than we do rape. No crime carries a perfect record of arrest, prosecution and incarceration, but the record for rape is especially wanting. The first circuit decision helped explain why, in my opinion. Too often our criminal justice system, as the phrase goes, just doesn't get it when it comes to crimes against women.

I acknowledge men can and have been raped as well, and a similar infliction of pain occurs, but the fact is well over 95 percent of the rapes are rapes of women.

If the first circuit decision stands, it would mean that a criminal would spend more time behind bars for breaking a man's arm than for raping a woman. If a carjacking occurred, and I was the man whose car was carjacked, and in the process of the carjacking my arm was severely broken, for that fellow who was convicted of raping the woman, had he broken my arm, there is no doubt the prosecution's request for an enhanced penalty of 25 years would have been upheld.

Think of that. We have a statute on the books that says you can enhance a penalty to 25 years for carjacking and inflicting serious bodily harm. Had it been a man with a broken arm, that guy would have been in jail for 25 years. But this was a woman who was raped. The court said, no, it does not meet the statutory requirement of serious bodily injury.

For 5 long years, Mr. President, I worked to pass a piece of legislation that I have cared about more than any other thing I have done in my entire Senate career and the thing of which I am most proud. That is the Violence Against Women Act. My staff and I wrote that from scratch. It took a long time to convince our colleagues and administrations, Democrat and Republican, that it was necessary. For 5 long years we worked to pass that law.

The act does a great many practical things. It funds more police and prosecutors specifically trained and devoted to combating rape and family violence. It trains police, prosecutors and judges in the ways of rape and family violence so that they can better understand, as, in my view, the first circuit did not understand, the nature of the problem and how to respond to the problem.

The violence against women legislation provides shelter for more than 60,000 battered women and their children. It provides extra lighting and emergency phones in subways, bus stops and parks because of the nature in which the work force has changed.

The woman sitting behind me who helped author that legislation is here at 9:30 at night. In my mother's generation, there were not many women who left work at 9:30 or 10:30 at night.