

GENERAL DYNAMICS

Land Systems Division

P.O. Box 527, Warren, Michigan 48090

HJR/dr:86-78
7 August 1986

Inter-Office Memo

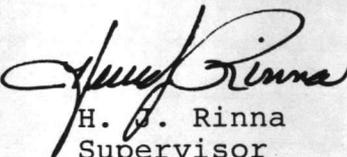
To: Site Supervisors

xc: F. Bryan, R. Wagner

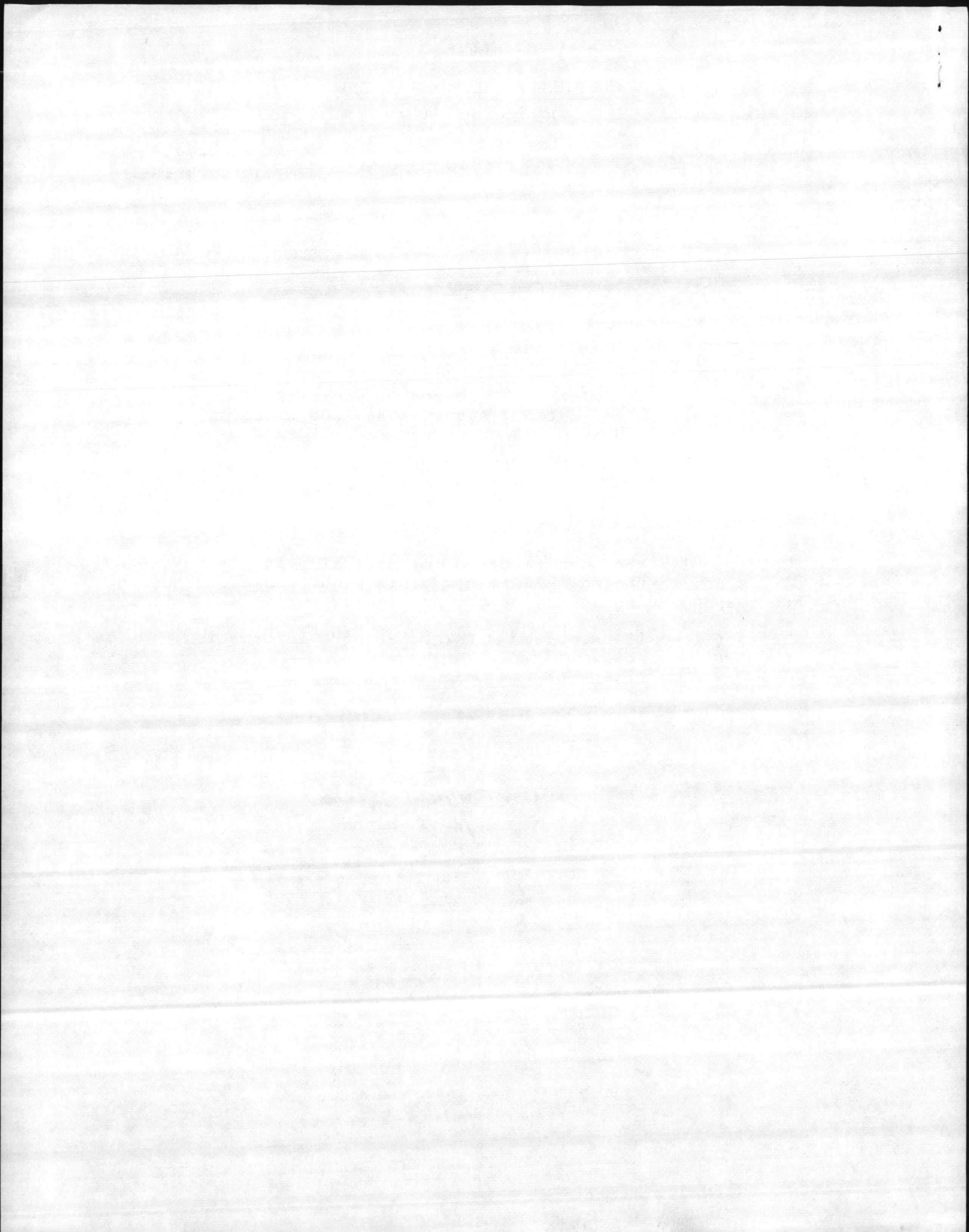
Subject: Turrent Vent Panel Rust

Enclosure: 1) IOM, JJM/86-115, Dated 5 August 1986
2) Letter dated 1 August 1986 from E. Bacon,
Germany

1. This problem has been reported for several years in CONUS. It is now surfacing in Germany. This might cause engineering to respond as to a fix for the problem.
2. This office will keep you informed as more information becomes available.



H. G. Rinna
Supervisor
Field Activities



GENERAL DYNAMICS
Land Systems Division
P.O. Box 527, Warren, Michigan 48090

Inter-Office Memo

JJM/86-115
5 August 1986

To: N. W. Hammes, J. J. Ruma

cc: W. F. Barnes, M. G. Bolin, F. Bryan,
A. W. Carion, L. V. Clarkson, J. L. Dietz,
P. L. Erickson, R. J. Fey, G. M. Hermsen,
R. G. Hill

Subject: Turret Bustle Ammo Compartment

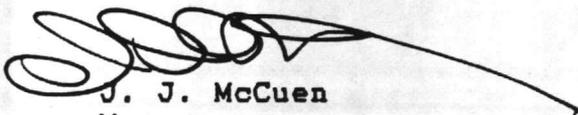
Reference: Letter from E. Bacon Dated 1 August 1986

Please note E. Bacon's IOM on serious rusting through of metal panel on turret roof of older European tanks. Apparently this is a wide-spread problem and it has been previously reported elsewhere (Knox). Predictably loader's hatch latches are starting to fail--a real safety problem for which we have a long standing still-born mod.

I suspect we'll get a blast from the PMO on the rusting problem. They've been the problem on the Loader's Hatch Latch Mod/MWO, but I understand the engineers are now going back for the "umpteenth" time to redesign it--I hope not.

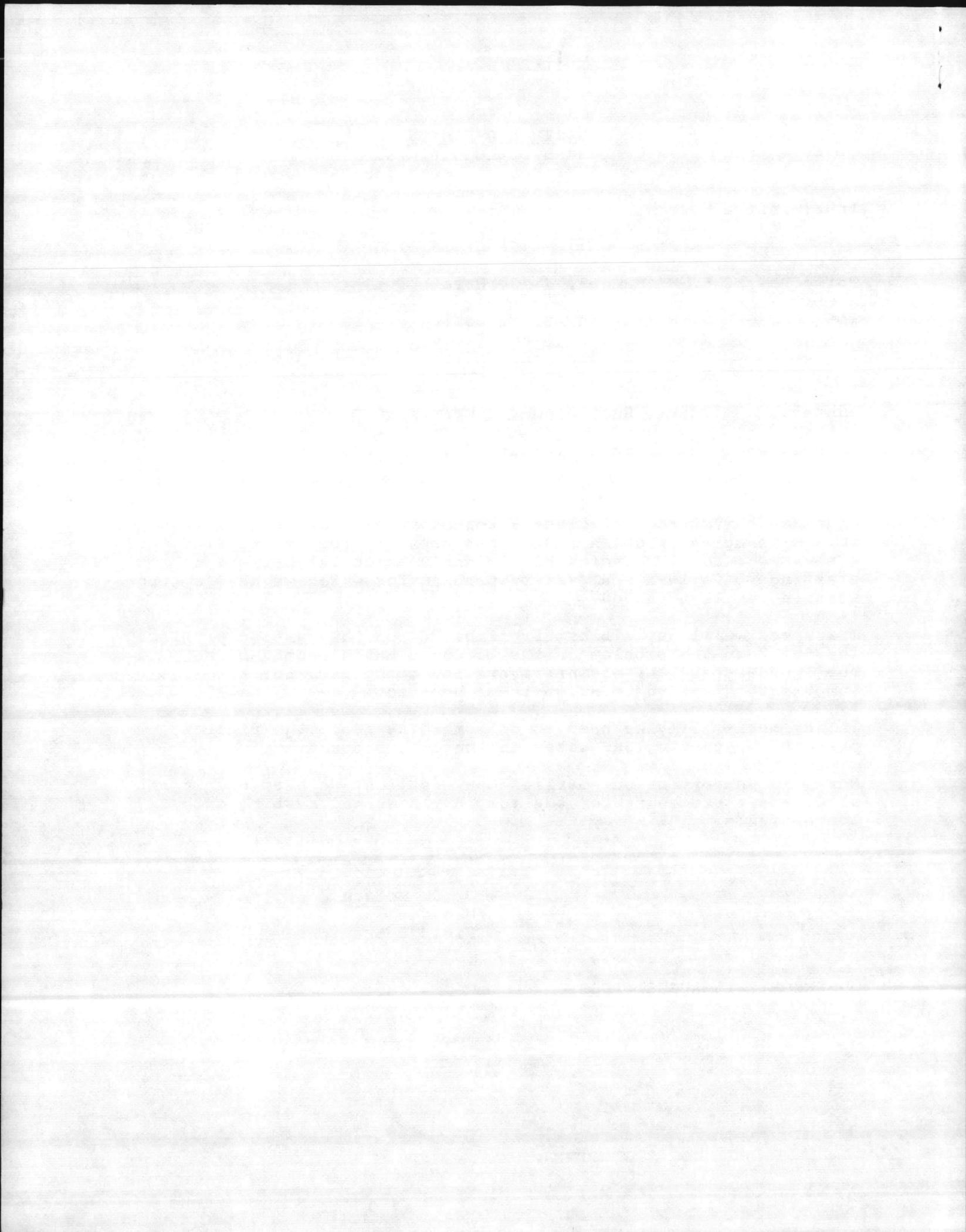
In any event, Jim, we need to do something about the plate to prevent the rusting and water in the ammo compartment.

Norm, in support of our earlier conversation, we need some sort of a repair procedure for the rusted plates and rusting ammo compartments.


J. J. McCuen
Manager
Field Operations

SUSPENSE: 15 AUGUST 1986

/dmd



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Land Systems Division

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1 Aug 86

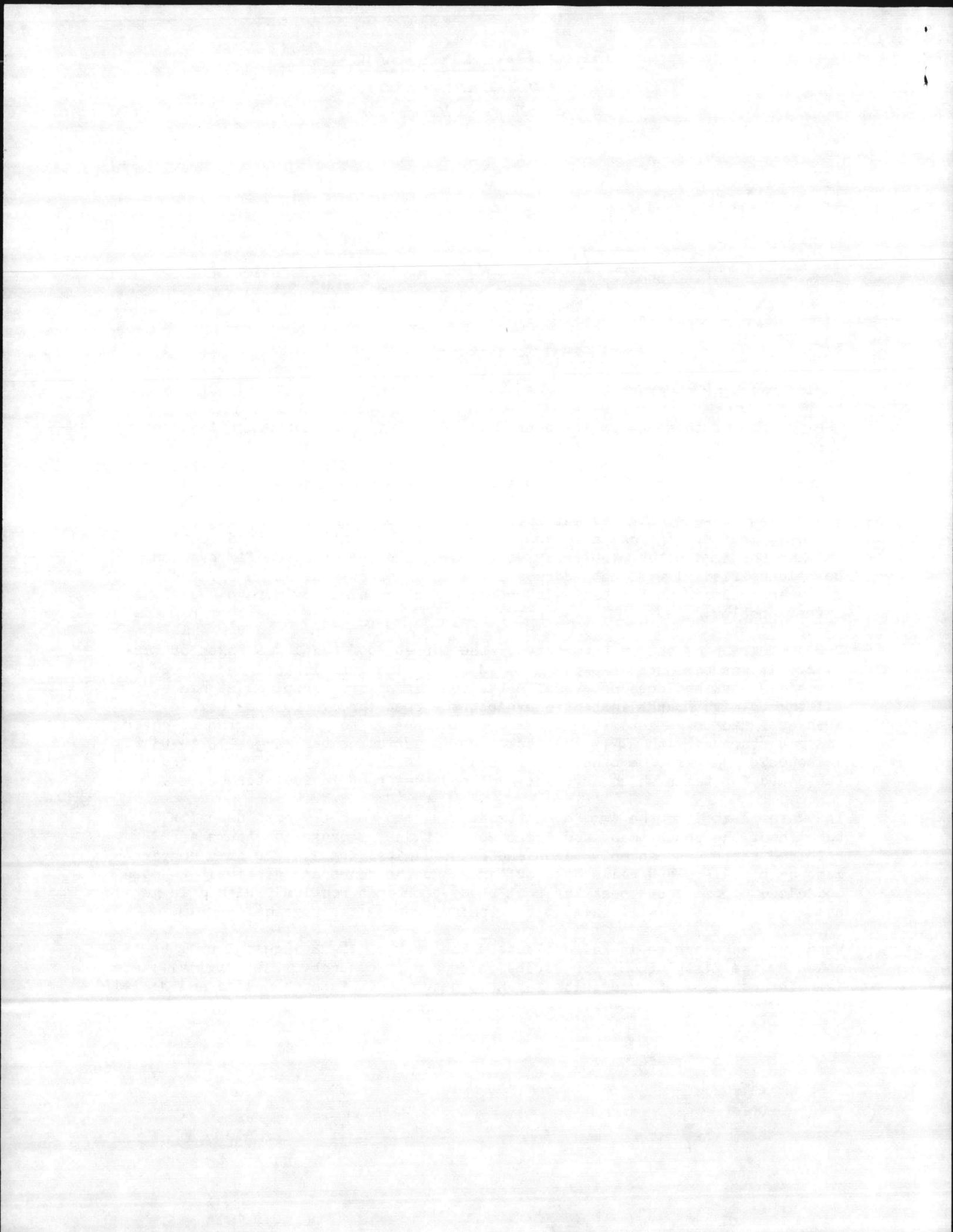
To: C. Crooms
cc: L. Clarkson, J. McCuen
Subject: Turret Bustle AMMO Compartment
Enclosure: Photographs

The purpose of this letter is to provide initial information regarding rusting through of metal panel on turret roof behind blowoff panels, and pose questions regarding repair procedures and long term effects. Yesterday, the initial inspection of 28 CAT tanks and 10 ORF tanks designated to be turned into 21st SUPCOM for upgrade under FORWARD FIELDING, was completed. The inspection revealed significant safety problems with the loaders hatch latches, leaf springs and ammo compartment water contamination and rusting. In that the ammo hatch problem is well known, and the proposed fix has long been identified, I will not address it in this report, except to say the past few years exposed to European winters have done nothing to improve a serious safety problem.

The photograph of the rust through of the turret roof panel was taken of tank 0112. It was the worst example I could find. The tank is assigned to ORF at division level and does not receive the benefit of crew level maintenance. All thirty-eight tanks inspected exhibit the rust through to some degree. When assigned to an active unit the crew members go to great lengths to cover the rust through with RTV. The tanks are in serial number range 112 to 0312. Telephonic reports from other 3rd ID sources indicate the problem is across the board for tanks which have not had the benefit of inside storage.

The water leak into the ammo compartment has lead to heavy rust deposits throughout the compartment and components within. Because the tanks are uploaded the crews can only clean and paint limited areas. The ammo compartment door rollers and rails have suffered and the doors are difficult to open and close. Some crews beat the semi ready door open routinely with a large hammer. Many doors will have to be repaired during the upgrade program.

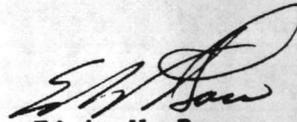
When the tanks arrive in Kaiserslautern the week of 18-22 August I will be asked by the 21st SUPCOM for advice on repair procedures. The original plate is thin and allows flexing with a hand pressure. It is spot welded and sealed



with EC801. After the EC801 is hard and the plate is flexed a few times the seal is gone and the rust through process begins. I would like a rough copy of a repair procedure which utilizes a heavier gage metal and a full seam weld. I feel it is necessary to pull the ammo racks for rust removal, painting and cleaning of the compartment and service repair of the doors, rollers, and rails.

The tanks have all been uploaded with the 105mm for several years. The ammo has been periodically cleaned, serviced, and rotated and I have heard no complaints of ammo being damaged. The M1A1 will present ammo with different characteristics. Long term exposure to the conditions that exist in the current 3rd ID tanks will lead to deterioration of the 120mm ammo. It is my understanding the M1A1 is designed differently in the bustle area however I'm not sure of any changes within the area rusting through.

My immediate need is advice on the repair procedures for the rust through area.



Edwin W. Bacon
M1 MFT WEST

