

FILE  
INCOMING

**GENERAL DYNAMICS**  
*Land Systems Division*

To: Bill Barnes & Frank Bryan      Date: 7/21/87  
xc: Other FO Chiefs  
Subject:

Bill,

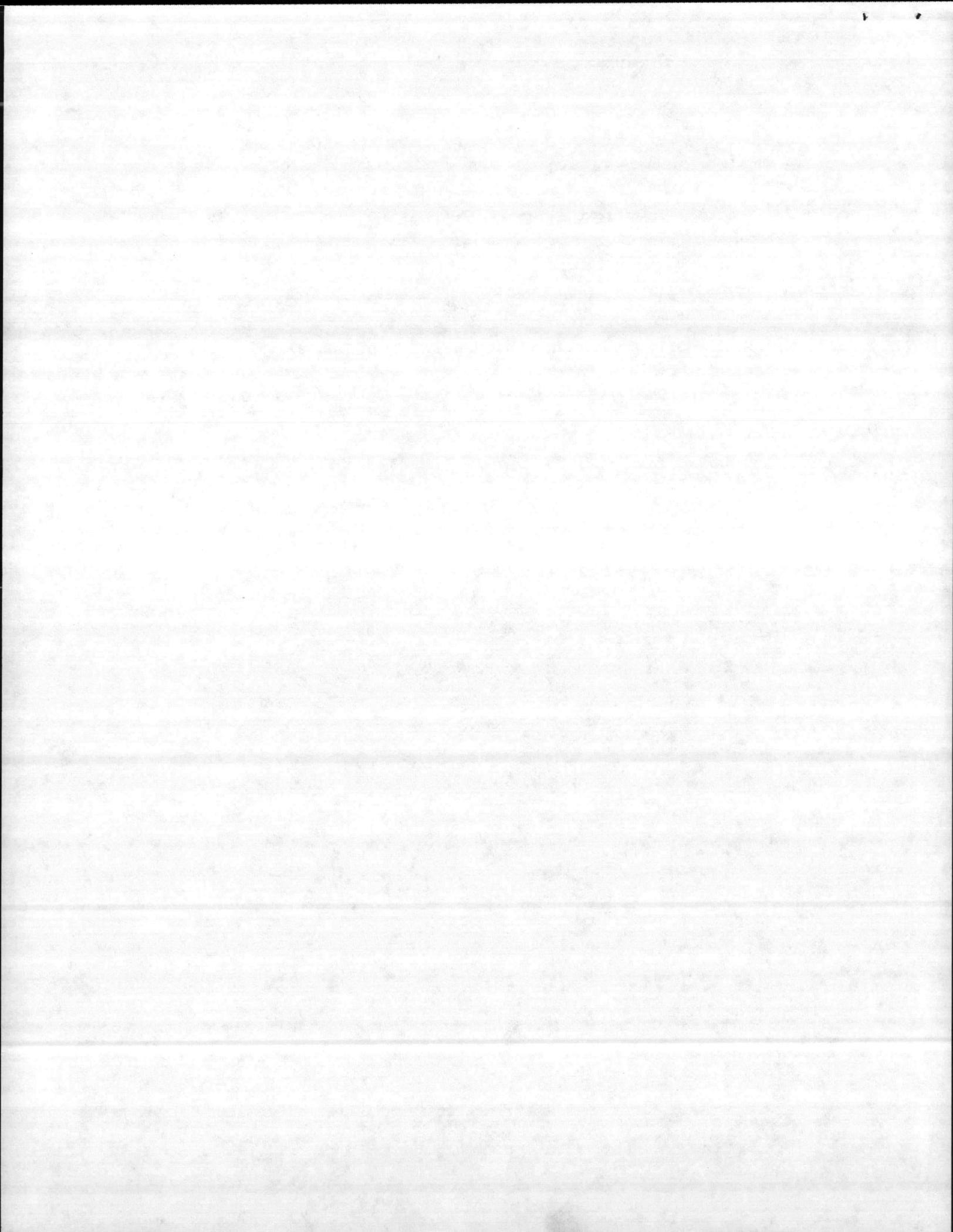
Please provide requested info.

Frank,

Please survey field for similar problems.

J. J. McCuen

SUSPENSE: 29 JULY 1987



**GENERAL DYNAMICS****Land Systems Division**

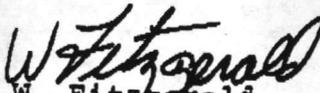
P.O. Box 1901, Warren, Michigan 48090

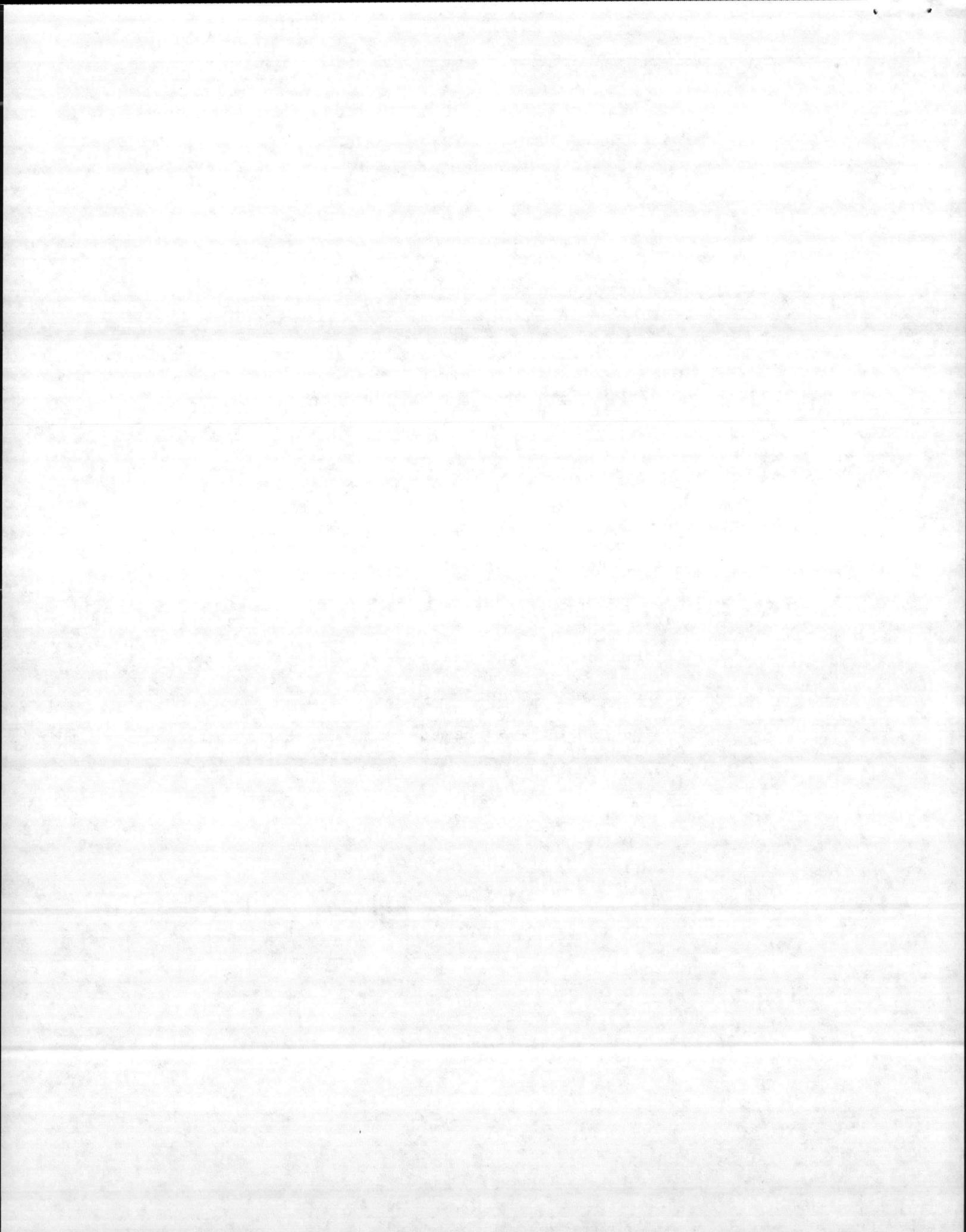
Inter-Office Memo

WLF/cr: 87-096  
July 28, 1987

To: H. Rinna  
Subject: Inspection of IPM1 Gun Shields

1. As requested by IOM CYP/87-43, an inspection of all IPM1 gun shields was conducted for the presence of water and distorted gun shields. The following data is submitted:
  - a) There is no part number for the gun shield liner. The part number for the gun shield is P/N 12321575.
  - b) One (1) gun shield was distorted, vehicle S/N 6240.
  - c) There was no way to determine if the distorted gun shield had any effect on gun performance. However, the thermal shroud was damaged and the tank commander had reported problems hitting targets on his last trip to the range.

  
W. Fitzgerald  
Site Supervisor  
Fort Knox, Kentucky



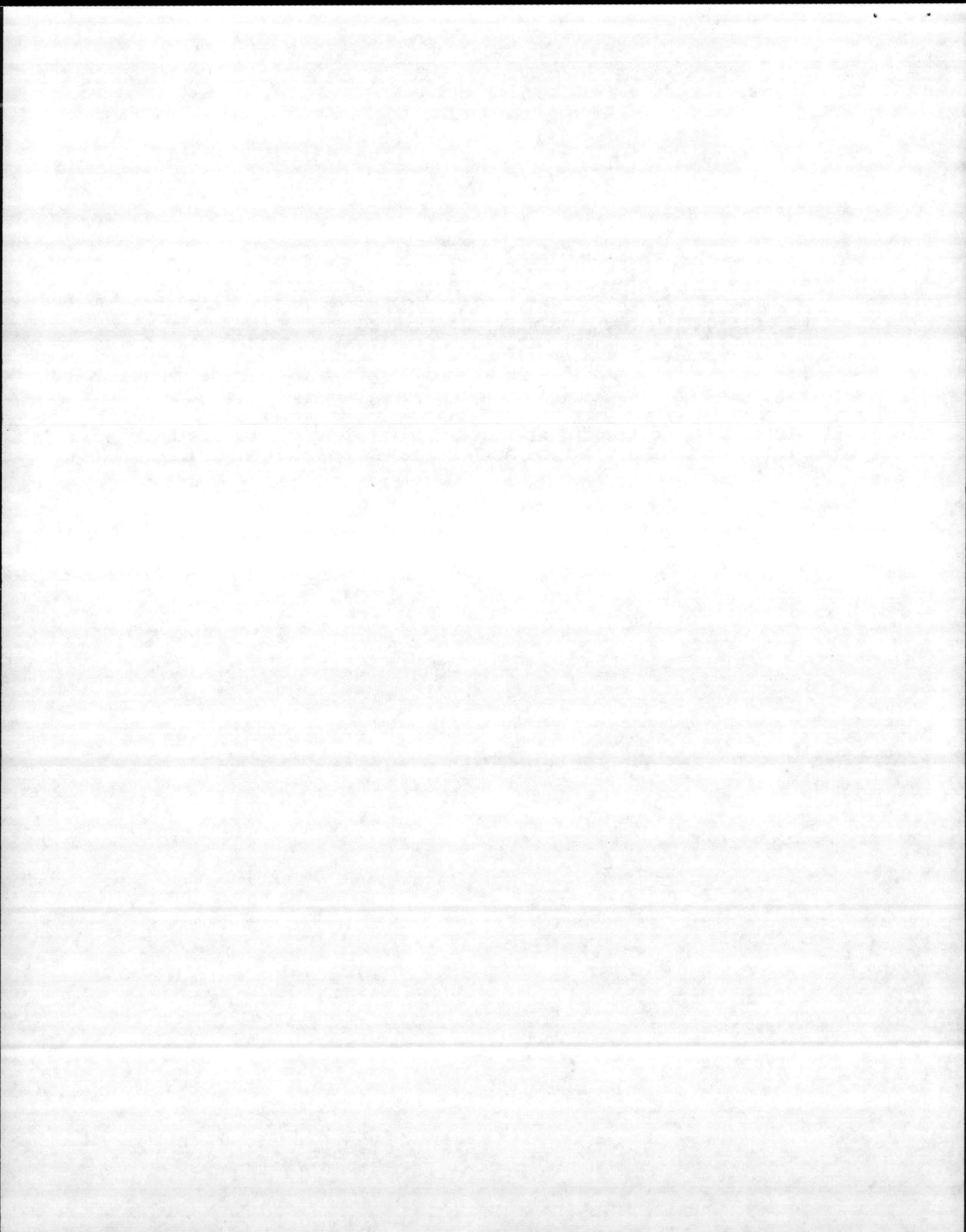
TO: H. RINNA

DATE: 28 JULY 1987

SUBJECT: IPM1 GUN SHIELDS

PER A MEMO FROM J.J. McCUEN DATED 21 JULY 1987, GUN SHIELDS ON IPM1 VEHICLES AT FORT STEWART WERE INSPECTED TO CHECK FOR LINER DISTORTION. THE VEHICLES AT FORT STEWART THAT WERE INSPECTED DID NOT EXHIBIT ANY SIGNS OF GUN SHIELD LINER DISTORTION THAT WAS REPORTED IN EUROPE. THE ONLY IRREGULARITIES THAT WERE NOTICED DURING THE INSPECTION WAS EVIDENCE OF WATER ACCUMULATION AND RUST STAINS ON THE LOWER RIGHT SIDE OF THE GUN SHIELD MOUNTING BRACKET AND AT THE TURRET CASTING BELOW THE GUN SHIELD THAT APPEARED TO BE CAUSED BY WATER RUN-OFF. I WOULD ASSUME THAT IF THESE VEHICLES WERE LOCATED IN A COLDER CLIMATE, THEY WOULD SURELY EXHIBIT THE SAME DISTORTION AS THE EUROPEAN IPM1/M1A1 VEHICLES.

JIM HEIBECK



Inter-Office Memo

CYP/87-43  
17 July 1987

To: R.J. Fey  
cc: P.L. Erickson, J.J. Ruma  
Subject: Request for IPM1 Gun Shield Problem Data

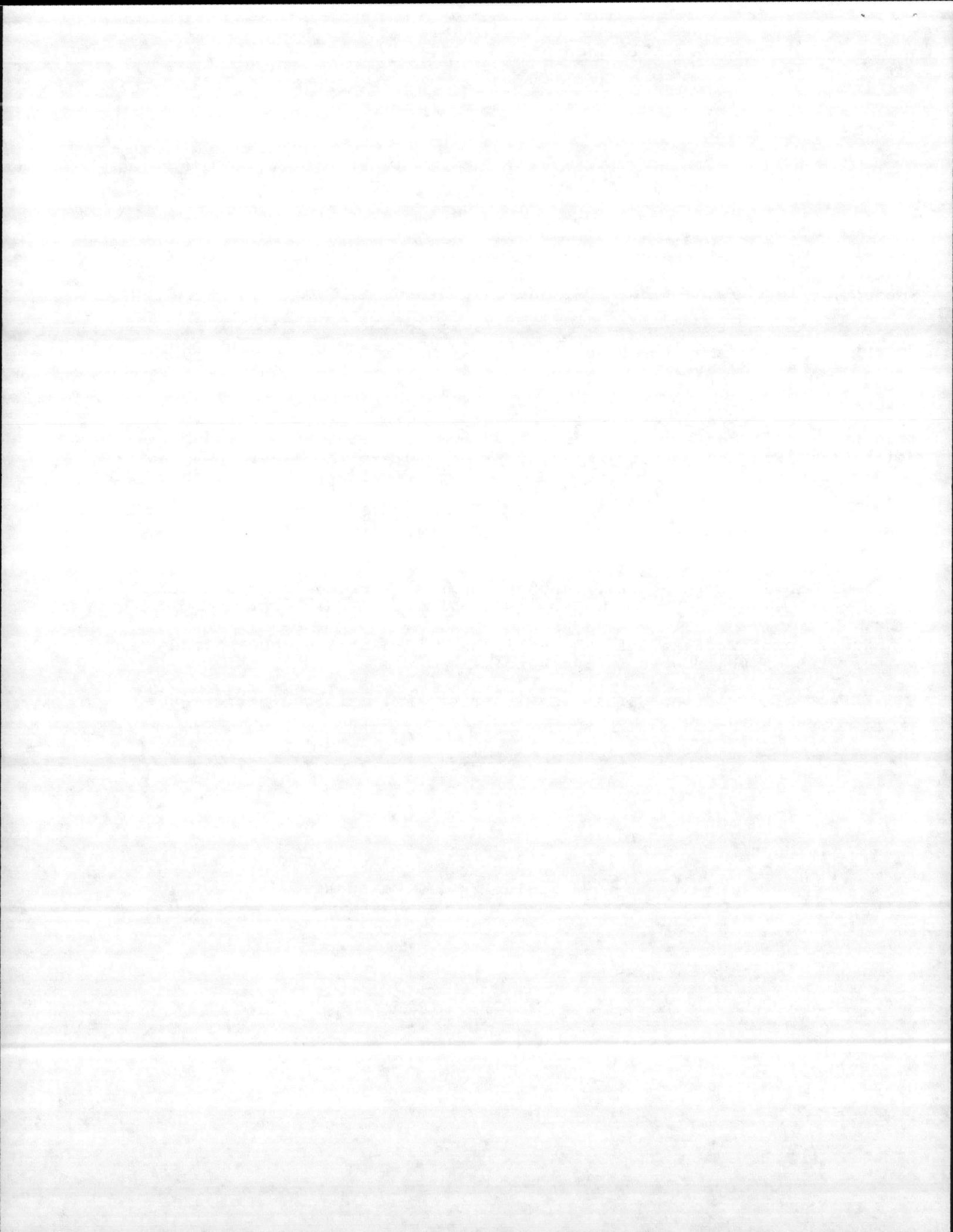
Recent correspondence has been received from Vilseck concerning IPM1 gun shield water entry. The GDLS field representatives have reported gun shield liner distortion on IPM1 tanks and have requested liner repair procedures. Action has previously been undertaken to correct the same problem reported on M1A1 gun shield water entry. The new reports of IPM1 gun shield water entry were presented at the 9 July Joint Field Problem meeting. The decision made at the meeting was not to fund any further corrective action on gun shields without further evidence of number of vehicles affected and definition of the problem.

Please forward this correspondence to the field sites to provide the following data:

1. IPM1 Gun Shield Liner part number for repair procedure requested by field.
2. Number or percentage of IPM1 vehicles with distorted gun shields, or list of vehicle serial numbers.
3. Effect of distorted gun shield liner on IPM1 main gun performance.

/kam

C.Y. Payne  
Supervisor  
Field Problem Management



**GENERAL DYNAMICS**

*Land Systems Division*

P.O. Box 527, Warren, Michigan 48090

VS/87-493  
29 June 87

TO: L. V. Clarkson  
Subject: IPM1 Gun Shield Bulges

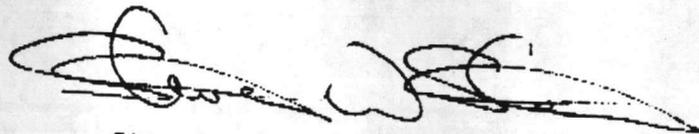
IPM1 in the 3rd Armor Division are experiencing bulging of the gun shield inner lines. The liner bulges are large enough to cause contact between the gun shield and main gun thermal shroud. Bulges are located from about 6 to 9 o'clock position of the gun opening when viewed from the front of the turret.

The IPM1 shield bulging problem is very similiar to the M1A1 gun shield bulges previously reported.

It appears the coax channel of the IPM1 gun shield is not fully welded and water enters the shield, freezes, and distorts the shield lines.

Repair procedures for damaged shields need to be fielded as soon as possible so repairs can be made.

See attached TM figure for location of damage on the IPM1 gun shields.

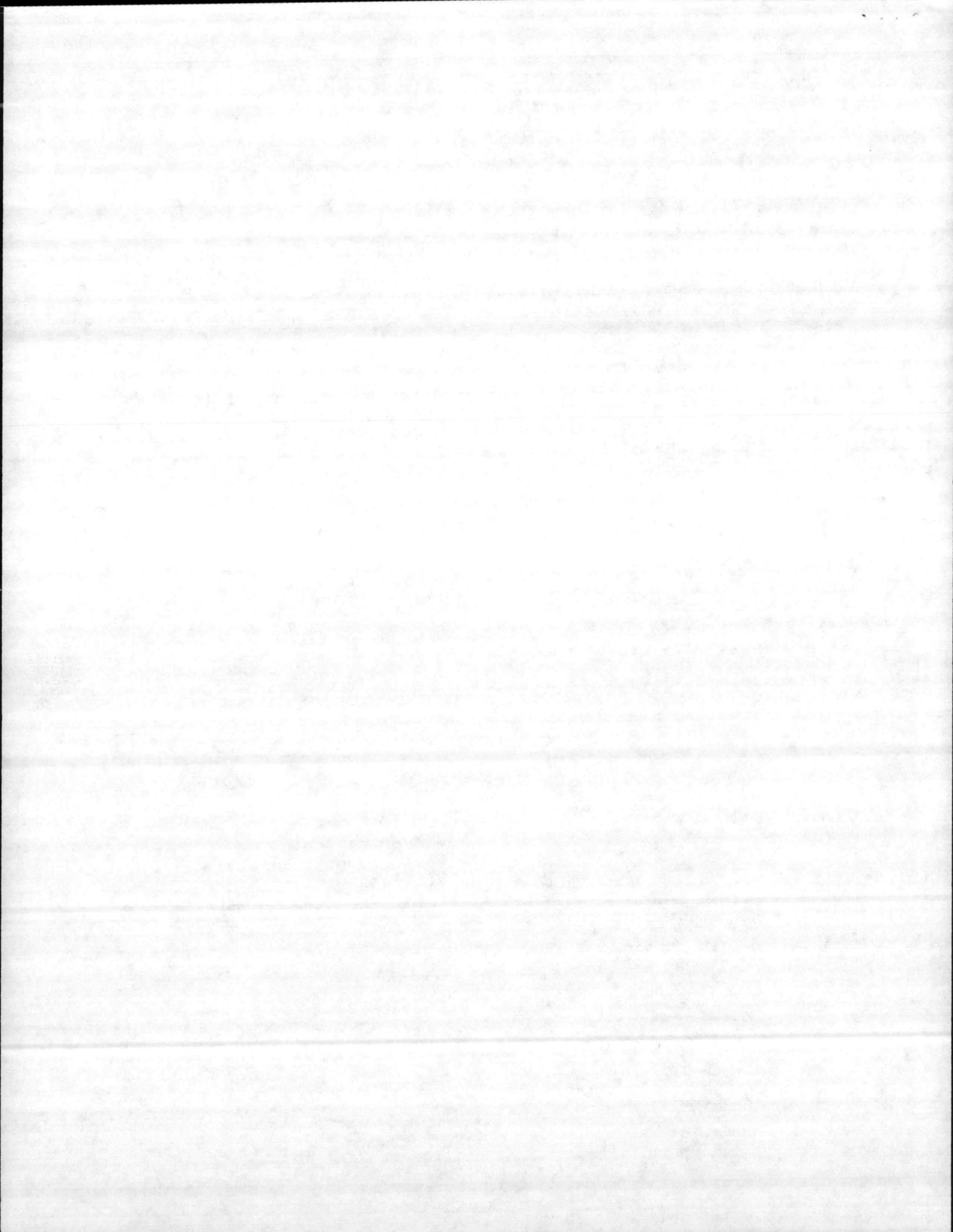


Steven W. Stein  
Field Support Supervisor  
Vilseck, Germany

(scj)

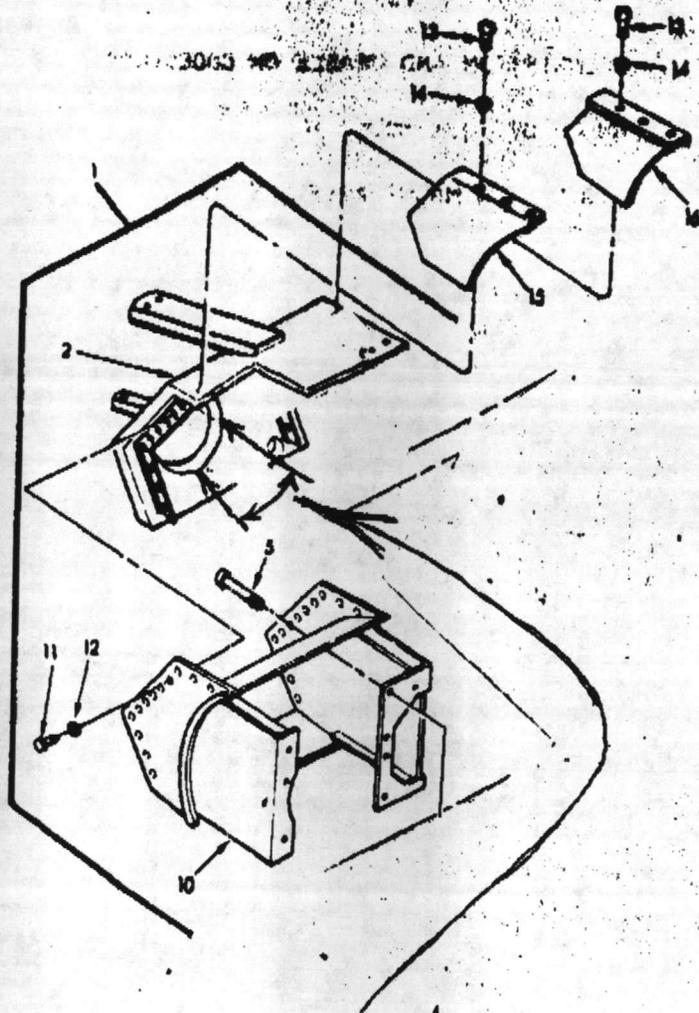
N. Boych  
J. McCuen  
R. Feizy  
J. Runa  
G. Hellman  
C. Payne  
F. Boyer  
H. Kenna

SWS/cs



SECTION II

TOP-2359-288-340-2



area where  
bulges noted  
on I P M 1's  
gun shield  
liner. Liner  
is not shown

