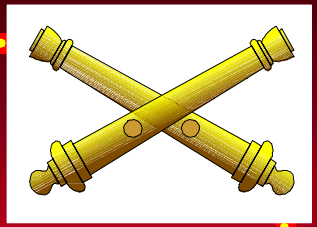
GUNNERY DEPARTMENT



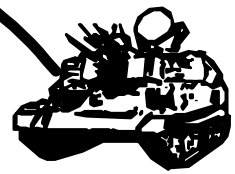
THE KING OF BATTLE

USAFAS

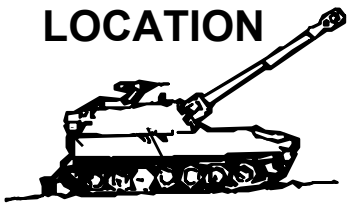
BCS REGISTRATIONS

FIVE REQUIREMENTS FOR ACCURATE PREDICTED FIRE

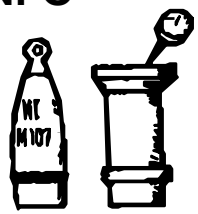
4
ACCURATE MET INFO



2
ACCURATE BATTERY LOCATION



3
ACCURATE AMMO & WPN INFO



1
ACCURATE TARGET LOCATION AND SIZE

5
ACCURATE COMPUTATIONAL PROCEDURES

USAFAS

5 Steps To Improve Firing Data

- 1. Rds burst at pt. of known location
- 2. Determine DHD & SHD
- 3. Determine Total Corrections
  Determine GFT Setting
  Apply to Subs Missions
- 4. Isolate POS/Quantify MET
  Concurrent Met
  4A.
  MET/MV Update
  4B.
  Survey Update
- 5. Update Total Corrections
  Subsequent Met New
  GFT Setting

5 Steps To Improve Firing Data

- 1. Rds burst at pt. of known location
- 2. Determine DHD & SHD
- 3. Determine Total Corrections
  Determine GFT Setting
  Apply to Subs Missions

- 4. Isolate POS/Quantify MET
  Concurrent Met

4A.

MET/MV Update

4B.

Survey Update

- 5. Update Total Corrections
  Subsequent Met

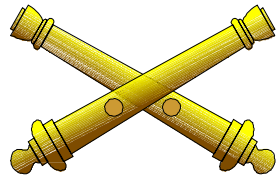
New

GFT Setting

USAFAS

What is more accurate- Automated SHD or Manual SHD?

Justify your answer!



Answer: AUTOMATED SHD

=

+ MANUAL SHD

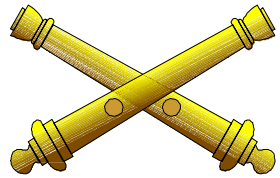
+ BCS SHD

+ KN PT DHD

- “When we register, we correct for “take up” factors that we can’t account for.

  So, why can’t we just register without MV’s and “take up” the lack of MV’s in the Registration?”

Scenario: **You have 2 M198's, and you register one right after the other using the same spade holes. All MET corrections in your DB for the 2 guns are identical to include MVV's of 0.0 m/s. The FDO expected TOTALS to be the same for both guns but instead they were different!**

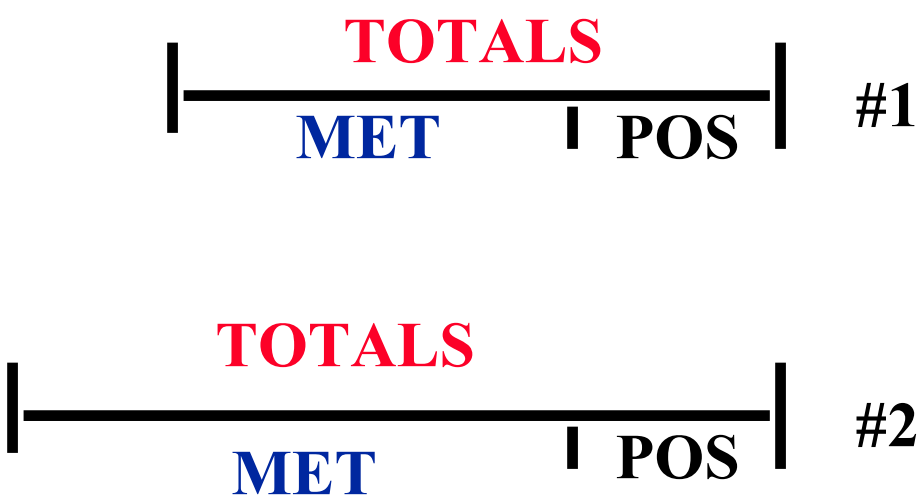


Suspecting a problem the FDO calibrates both and determines #1 MVV: 0.0 m/s, #2 MVV: -5.0 m/s.

#2 w/o MVV's

#2 w/ MVV's
(MVV is rescued from POS)

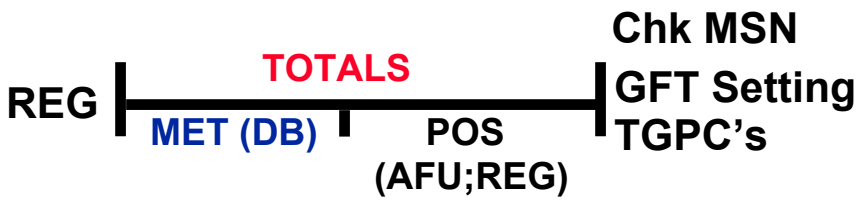
Bottom Line: Since we have different MET for the two guns, we no longer expect to determine the same TOTALS. Each gun in BCS will have unique TOTALS.



POS is the same, but have different MET.

5 Steps To Improve Firing Data

- 1. Rds burst at pt. of known location
- 2. Determine DHD & SHD
- 3. Determine Total Corrections
  - Determine GFT Setting
  - Apply to Subs Missions



- 4. Isolate POS/Quantify MET
  - Concurrent Met

4A.

MET/MV Update

4B.

Survey Update

- 5. Update Total Corrections
  - Subsequent Met

New GFT Setting

USAFAS

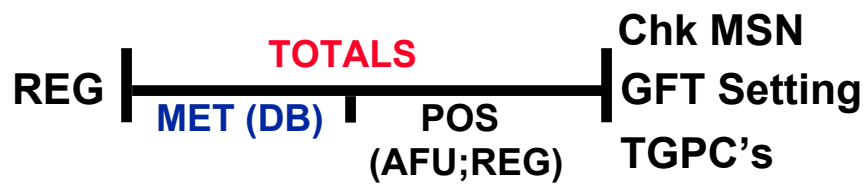
5 Steps To Improve Firing Data

- 1. Rds burst at pt. of known location
- 2. Determine DHD & SHD
- 3. Determine Total Corrections
  - Determine GFT Setting
  - Apply to Subs Missions
- 4. Isolate POS/Quantify MET
  - Concurrent Met

  MET/MV Update

  Survey Update
- 5. Update Total Corrections
  - Subsequent Met

  GFT Setting



4A.

4B.

New

USAFAS

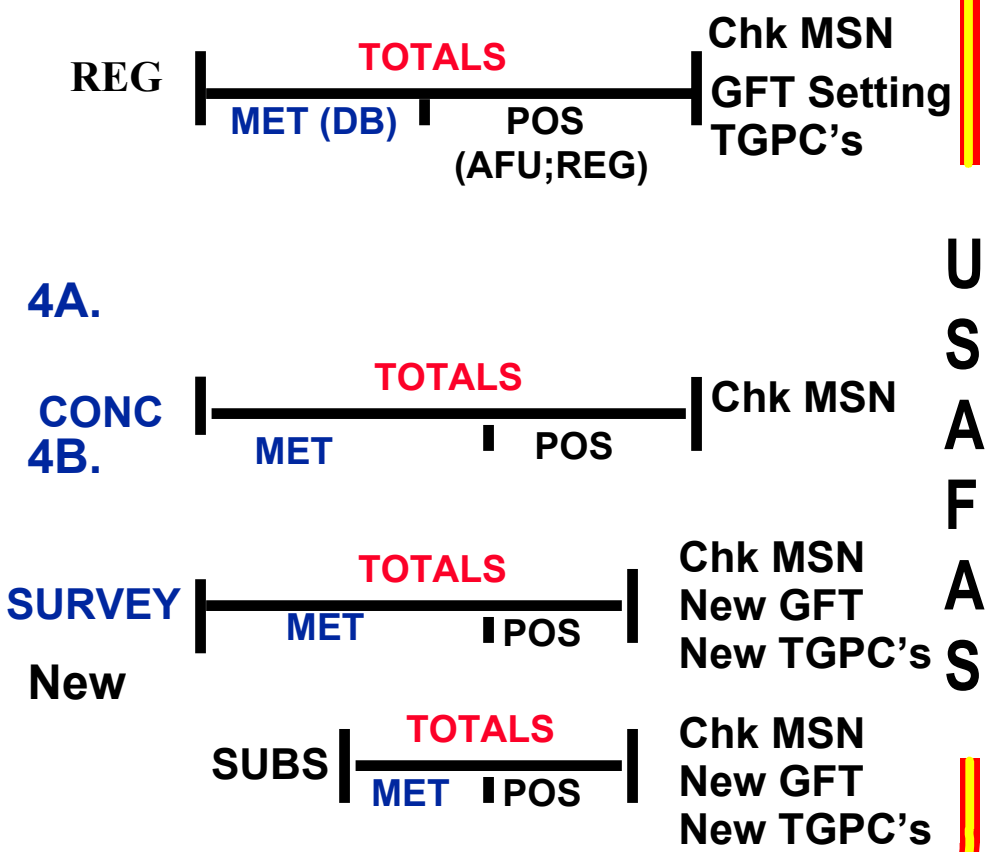
5 Steps To Improve Firing Data

- 1. Rds burst at pt. of known location
- 2. Determine DHD & SHD
- 3. Determine Total Corrections
  - Determine GFT Setting
  - Apply to Subs Missions
- 4. Isolate POS/Quantify MET
  - Concurrent Met

  MET/MV Update

  Survey Update
- 5. Update Total Corrections
  - Subsequent Met

  GFT Setting



BCS MVV APPLICATION

How FDO should apply MVVs:

- Same gun
- Same proj family
- Same prop lot
- Same charge or to other charges according to an order of preference:
  - » Down 1 chg
  - » Up 1 Chg
  - » Down 2 chgs
  - » Up 2 chgs
  - » To any other prefered chg
  - » From a prefered to a restricted chg

How the BCS will apply MVVs:

- Same gun
- Same proj family
- Same prop type
- Same charge or to other charges according to an order of preference:
  - > Down 1 chg
  - > Up 1 Chg
  - > Down 2 chgs
  - > Up 2 chgs
  - > Down 3 chgs
  - > Up 3 chgs

BCS <u>will</u> transfer a restricted chg!

NEVER transfer a restricted chg!

GIVEN: **You have the following uncalibrated propellants on hand: M3A1-lot G, M3A1-lot T, M4A2-lot W, M4A2-lot Z.**

You calibrate Gun #2 (M109A3) with charge 3, M3A1 (lot G), shell-M107. After calibrating and MVV storage in your BCS, you begin missions:

FIRE COMMANDS:

Question # 1: "FM, #2, 2rds, shell HE, Lot A/T, Chg 4, Fz...."
Answer:

GIVEN: You have the following uncalibrated propellants on hand: M3A1-lot G, M3A1-lot T, M4A2-lot W, M4A2-lot Z.

You calibrate Gun #2 (M109A3) with charge 3, M3A1 (lot G), shell-M107. After calibrating and MVV storage in your BCS, you begin missions:

FIRE COMMANDS:

Question #1: "FM, #2, 2rds, shell HE, Lot A/T, Chg 4, Fz...."
Answer: You SHOULD NOT due to different powder lots
BCS WILL

GIVEN: **You have the following uncalibrated propellants on hand: M3A1-lot G, M3A1-lot T, M4A2-lot W, M4A2-lot Z.**

You calibrate Gun #2 (M109A3) with charge 3, M3A1 (lot G), shell-M107. After calibrating and MVV storage in your BCS, you begin missions:

FIRE COMMANDS:

Question # 2: "FM, #2, 1rd, shell WP, Lot A/G, Chg 4, Fz...."
Answer:

GIVEN: **You have the following uncalibrated propellants on hand: M3A1-lot G, M3A1-lot T, M4A2-lot W, M4A2-lot Z.**

You calibrate Gun #2 (M109A3) with charge 3, M3A1 (lot G), shell-M107. After calibrating and MVV storage in your BCS, you begin missions:

FIRE COMMANDS:

Question # 2: "FM, #2, 1rd, shell WP, Lot A/G, Chg 4, Fz...."
Answer: You SHOULD transfer; BCS WILL.

GIVEN: **You have the following uncalibrated propellants on hand: M3A1-lot G, M3A1-lot T, M4A2-lot W, M4A2-lot Z.**

You calibrate Gun #2 (M109A3) with charge 3, M3A1 (lot G), shell-M107. After calibrating and MVV storage in your BCS, you begin missions:

FIRE COMMANDS:

Question #3: "FM, #2, 3rds, shell RAP, Lot R/G, Chg 3, Fz..."
Answer:

GIVEN: You have the following uncalibrated propellants on hand: M3A1-lot G, M3A1-lot T, M4A2-lot W, M4A2-lot Z.

You calibrate Gun #2 (M109A3) with charge 3, M3A1 (lot G), shell-M107. After calibrating and MVV storage in your BCS, you begin missions:

FIRE COMMANDS:

Question #3: "FM, #2, 3rds, shell RAP, Lot R/G, Chg 3, Fz..."
Answer: You SHOULD NOT due to different projoectile family; BCS WILL NOT.

GIVEN: **You have the following uncalibrated propellants on hand: M3A1-lot G, M3A1-lot T, M4A2-lot W, M4A2-lot Z.**

You calibrate Gun #3 (M109A3) with charge 7, M4A2 (lot Z), shell-M795. After calibrating and MVV storage in your BCS, you begin missions:

FIRE COMMANDS:

Question #4: "FM, #3, 4rds, shell HEF, Lot H/Z, Chg 3, Fz..."
Answer:

GIVEN: You have the following uncalibrated propellants on hand: M3A1-lot G, M3A1-lot T, M4A2-lot W, M4A2-lot Z.

You calibrate Gun #3 (M109A3) with charge 7, M4A2 (lot Z), shell-M795. After calibrating and MVV storage in your BCS, you begin missions:

FIRE COMMANDS:

Question #4: "FM, #3, 4rds, shell HEF, Lot H/Z, Chg 3, Fz..."
Answer: You SHOULD transfer from preferred to restricted; BCS WILL NOT (stops at up 3).

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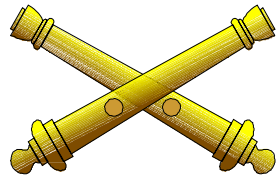
PRECISION REGISTRATION



Fire Order: Precesion, Registration on KN PT 1 with Fist 07, #1, 1 rd, Lot M/Y, Chg 5, Q & TI

FM;CFF:_;TGTPR75XX;KNPT:01;CORD:543427/03839453/420__;GZ:___;RV:___;
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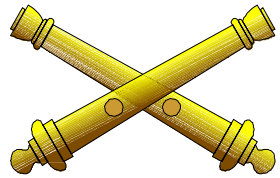
CONT:____/____;ME:____/REG;TIME:__/__;MIS:_;PRI:_;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__;VOL:__;STR:____;
EOM:_;RAT:_;ASNFPF:_;UFFE:_/_/_/__/___,_/_/_/__/___; ¾
LOT:M/Y;CHG:5;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;
PTF:1___;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
SHEAF:____;VOLCMD:_;CSLOAD:_;RPT:_;

GUNNERY DEPARTMENT



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CONT:____/____;ME:____/REG;TIME:__/__;MIS:_;PRI:_;PTM:_____;
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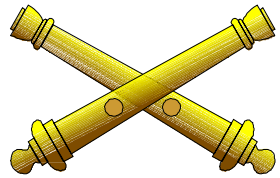
GUNNERY DEPARTMENT



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SHAJ:HEA;FZE:PDA_;AUF:_/1/A/1_/51_;SHEF:___/___;FZ:____/____;
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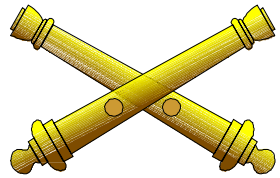
GUNNERY DEPARTMENT



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DIRECTION 6400

U
S
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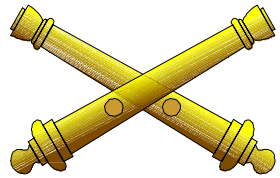
GUNNERY DEPARTMENT



R170, +100

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ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
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PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
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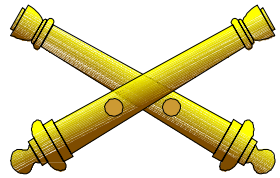
GUNNERY DEPARTMENT



R170, +100

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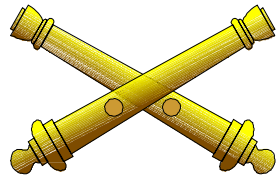

-50

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LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:___;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
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GUNNERY DEPARTMENT

-50

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
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EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:___;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
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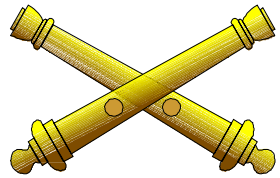
GUNNERY DEPARTMENT



2 RDS, -25

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LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:2RD;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
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HOB:____;RG:_____;TOF:___._;MAXORD:_____;
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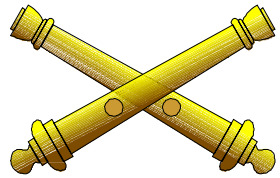
GUNNERY DEPARTMENT



2 RDS, -25

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
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OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:2RD;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:_;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

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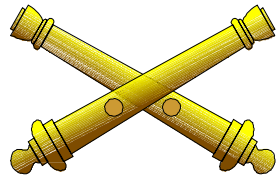
USAFAS

GUNNERY DEPARTMENT



1 RD, +25

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:_/____/+/25__/_/____;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:1RD;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:_;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

USAFAS

GUNNERY DEPARTMENT

1 RD, +25

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:_/____/+/25__/_/____;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:1RD;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:_;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

DF 3237 QE 437

USAFAS

GUNNERY DEPARTMENT

L10, -10, REC AS REG PT, TI RPT

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:L/10___/-/10__/_/____;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/TID_;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:___;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:X;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

USAFAS

L10, -10, REC AS REG PT, TI RPT

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:L/10___/-/10__/_/____;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/TID_;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:___;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:X;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

TI 28.3 DF 3238 QE 441

USAFAS

GUNNERY DEPARTMENT

U40

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:_/____/_/____/U/40__;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:___;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:_;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

USAFAS

GUNNERY DEPARTMENT

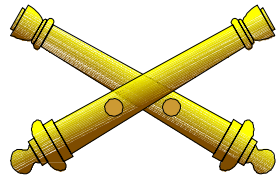
U40

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:_/____/_/____/U/40__;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:___;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:_;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

TI 28.0 DF 3238 QE 441

USAFAS

GUNNERY DEPARTMENT

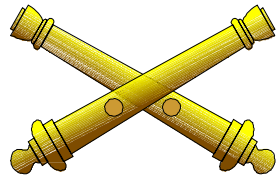


3 RDS, RPT

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:3RD;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:_;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

USAFAS

GUNNERY DEPARTMENT



3 RDS, RPT

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:3RD;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:_;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

TI 28.0 DF 3238 QE 441

USAFAS

GUNNERY DEPARTMENT

D25, REC AS TI REG PT, EOM

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:_/____/_/____/D/25__;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:___;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:_;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

USAFAS

GUNNERY DEPARTMENT

D25, REC AS TI REG PT, EOM

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:_/____/_/____/D/25__;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:_;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:___;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:_;TIRPT:_;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

DHD: TI 28.2 DF 3238 QE 441

USAFAS

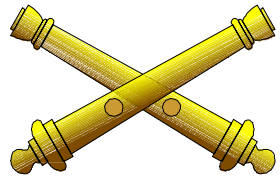
GUNNERY DEPARTMENT

D25, REC AS TI REG PT, EOM

FM;SUBS;TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;SHFCOR:_;
OBSN:_____;SIT:____;TYPE:_____/_____;DISPO:____/____;CAS:____;
EOM:X;RAT:_;CONT:____/____;ME:____/___;UFFES:_/_/_/__/___;PTM:_____;
ASF:___/____;SH:___/___;FZ:____/____;RDS:__ ;¾
LOT:_;CHG:_;LOTS:_/_/_/_;CHGS:_/_;FIRINT:___;CMD:___;SHEAF:_____;
PTF:____;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;REP:_;ALT:_____;GTAZ:____;GTRG:_____;
ACORD:_____/_____/_____;AGZ:___;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
RARP:_;RATI:X;TIRPT:_;LOT2R:_;VOLCMD:_;CSLOAD:_;RPT:_;

USAFAS

GUNNERY DEPARTMENT



AFU;REG;FU:_/1/A/1_/51_;SHL:HEA;LOT:M/Y;CHG:5;FZE:TID_;DELETE:_;
RG:_7964;RNGCR:_-161;TI:_28.2;TIMECR:-0.1;DEFLCR:R/__5;
STDMET:X;ANGLE:LOW_; ¾TGT:PR75XX;DTG:__/__/__;MET:_;SURP:_;SURT:_;MV:_;

USAFAS

p. 5-16

BCS STORAGE OF REGISTRATION CORRECTIONS

- ANGLE OF FIRE (LOW OR HIGH)
- CHARGE
- PROPELLANT LOT
- PROJECTILE LOT

p 5-17

BCS APPLICATION OF REGISTRATION CORRECTIONS

- ANGLE OF FIRE (MUST MATCH)
- PROJECTILE FAMILY (BCS WILL APPLY HE REG CORR TO DPICM/M825 ONLY IF FZ TID/TIG IN AFU;REG) (MUST MATCH)
- PROPELLANT TYPE (MUST MATCH)

If more than one set of applicable AFU;REGs are on file then:

- PROPELLANT LOT
- CHARGE MATCH
- CHARGE SELECTION (3 DOWN/3 UP)
- Projectile Type
- Projectile Lot

APPLICATION EXAMPLES

PRECISION REGISTRATION ON KN PT 1, WITH FIST 07, #1, 1 RND, SHELL HE, LOT M/Y, CHG 5 GB, Q & TI (M582)

PLT 2 RNDS, SH HEA, LOT M/T, CHG 5 WB, FZ TID, ...

WILL THE REG CORR TRANSFER?

APPLICATION EXAMPLES

PRECISION REGISTRATION ON KN PT 1, WITH FIST 07, #1, 1 RND, SHELL HE, LOT M/Y, CHG 5 GB, Q & TI (M582)

PLT 2 RNDS, SH HEA, LOT M/T, CHG 5 WB, FZ TID, ...

WILL THE REG CORR TRANSFER?

NO! DIFFERENT PROPELLANT TYPES

APPLICATION EXAMPLES

PRECISION REGISTRATION ON KN PT 1, WITH FIST 07, #1, 1 RND, SHELL HE, LOT M/Y, CHG 5 GB, Q & TI (M582)

PLT 2 RNDS, SH HEA, LOT M/Y, CHG 4 GB, FZ TID, ...

WILL THE REG CORR TRANSFER?

APPLICATION EXAMPLES

PRECISION REGISTRATION ON KN PT 1, WITH FIST 07, #1, 1 RND, SHELL HE, LOT M/Y, CHG 5 GB, Q & TI (M582)

PLT 2 RNDS, SH HEA, LOT M/Y, CHG 4 GB, FZ TID, ...

WILL THE REG CORR TRANSFER?

YES!

APPLICATION EXAMPLES

PRECISION REGISTRATION ON KN PT 1, WITH FIST 07, #1, 1 RND, SHELL HE, LOT M/Y, CHG 5 GB, Q & TI (M582)

PLT 2 RNDS, SH HEF, LOT F/Y, CHG 5 GB, FZ TID, ...

WILL THE REG CORR TRANSFER?

APPLICATION EXAMPLES

PRECISION REGISTRATION ON KN PT 1, WITH FIST 07, #1, 1 RND, SHELL HE, LOT M/Y, CHG 5 GB, Q & TI (M582)

PLT 2 RNDS, SH HEF, LOT F/Y, CHG 5 GB, FZ TID, ...

WILL THE REG CORR TRANSFER?

YES!

REQUIREMENTS TO TRANSFER POSITION CONSTANTS

- MUST BE ON COMMON SURVEY
- REGISTERING FDC MUST ACCOUNT FOR ALL MEASUREABLE NON-STANDARD CONDITIONS THAT AFFECTED THE HOWITZER AND PROJECTILE DURING THE REGISTRATION

CONCURRENT MET TECHNIQUE

AFU;REG;FU:_/1/A/1_/51_;SHL:HEA;LOT:M/Y;CHG:5;FZE:TID_;DELETE:_;
RG:_7964;RNGCR:_-161;TI:_28.2;TIMECR:-0.1;DEFLCR:R/__5;
STDMET:X;ANGLE:LOW_; ¾TGT:PR75XX;DTG:__/__/__;MET:X;SURP:_;SURT:_;MV:_;

CONCURRENT MET TECHNIQUE

AFU;REG;FU:_/1/A/1_/51_;SHL:HEA;LOT:M/Y;CHG:5;FZE:TID_;DELETE:_;
RG:_7964;RNGCR:__-36;TI:_28.2;TIMECR:-0.3;DEFLCR:R/__5;
STDMET:_;ANGLE:LOW_; ¾TGT:PR75XX;DTG:__/__/__;MET:_;SURP:_;SURT:_;MV:_;

VERIFICATION MISSION
DHD = DHD

FM;CFF:_;TGTPR75XX;KNPT:01;CORD:543427/03839453/420__;GZ:___;RV:___;
OB:__;FST:__;DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;
LAS:____;TYPE:_____/_____;DOP:_____;SIZE:____/____;ATT:____;
CONT:____/FFE_;ME:____/___;TIME:__/__;MIS:_;PRI:_;PTM:_____;
ASF:___/____;SH:HEA/___;FZ:TID_/____;RDS:__;VOL:__;STR:____;
EOM:_;RAT:_;ASNFPF:_;UFFE:_/_/_/__/___,_/_/_/__/___; ¾
LOT:_/_;CHG:_;LOTS:M/Y/_/_;CHGS:5/_;FIRINT:___;
PTF:1___;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
SHEAF:____;VOLCMD:_;CSLOAD:_;RPT:_;

VERIFICATION MISSION
DHD = DHD

FM;CFF:_;TGTPR75XX;KNPT:01;CORD:543427/03839453/420__;GZ:___;RV:___;
OB:__;FST:__;DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;
LAS:____;TYPE:_____/_____;DOP:_____;SIZE:____/____;ATT:____;
CONT:____/FFE_;ME:____/___;TIME:__/__;MIS:_;PRI:_;PTM:_____;
ASF:___/____;SH:HEA/___;FZ:TID_/____;RDS:__;VOL:__;STR:____;
EOM:_;RAT:_;ASNFPF:_;UFFE:_/_/_/__/___,_/_/_/__/___; ¾
LOT:_/_;CHG:_;LOTS:M/Y/_/_;CHGS:5/_;FIRINT:___;
PTF:1___;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
SHEAF:____;VOLCMD:_;CSLOAD:_;RPT:_;

DHD: TI 28.2 DF 3238 QE 441

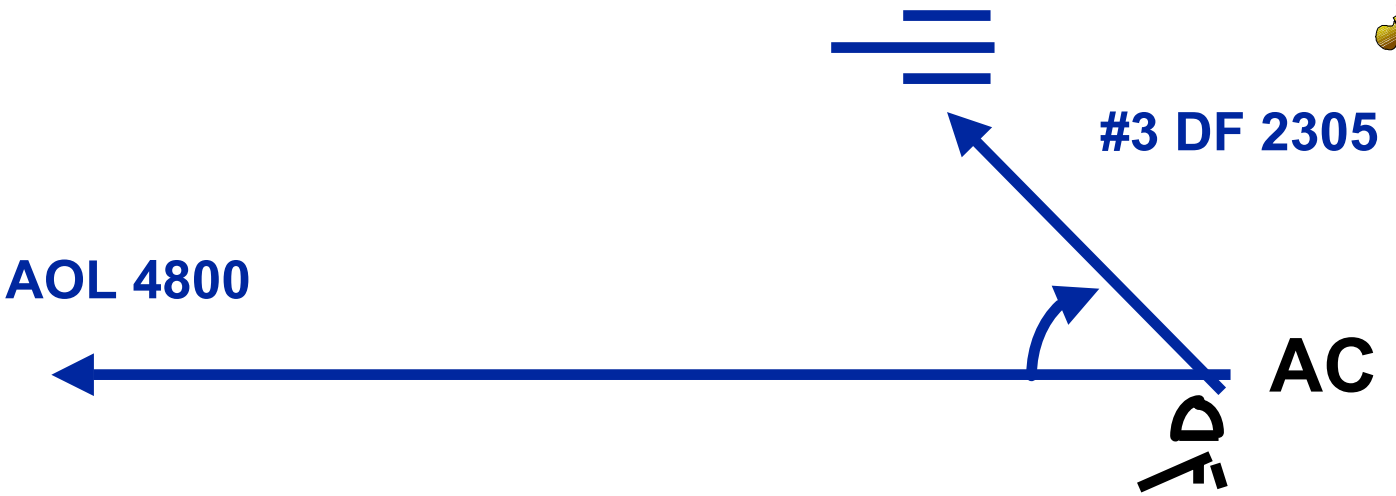
SURVEY UPDATE

- SURVEY ARRIVES IN POSITION
- NEW ORSTA GRID 51291/39308/420
- XO MEASURES THE CORRECT AOL 4794 AND RE-ENTERS IN AFU;UPDATE
- BCS OPERATOR DELETES AND RE-ENTERS GUN DATA BY APPLYING THE ACTUAL AOL TO THE FINAL LAY DFs (AOL 4794 + FINAL LAY DFs)
- DETERMINE NEW COB 51400/39532/420

SURVEY UPDATE

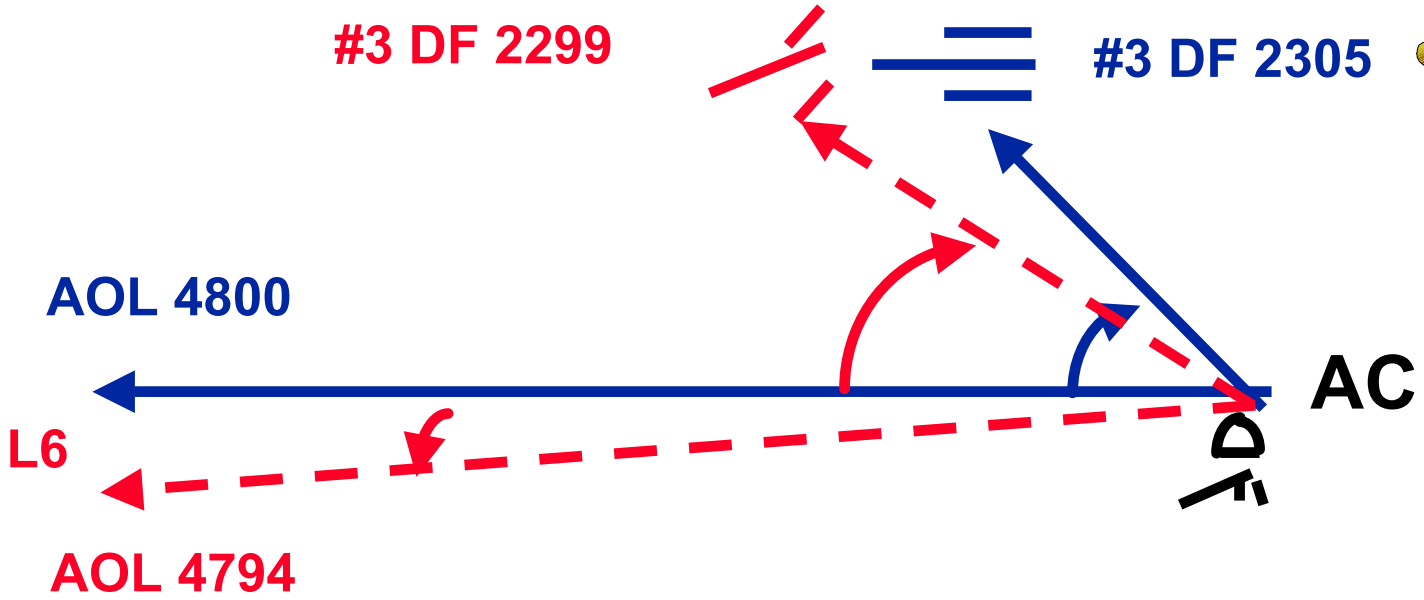
- SURVEY ARRIVES IN POSITION
- NEW ORSTA GRID 51291/39308/420
- XO MEASURES THE CORRECT AOL 4794
- BCS OPERATOR DELETES AND RE-ENTERS GUN DATA BY APPLYING L6 TO THE FINAL LAY DFs
- DETERMINE NEW COB 51400/39532/420

GUNNERY DEPARTMENT



USAFAS

GUNNERY DEPARTMENT



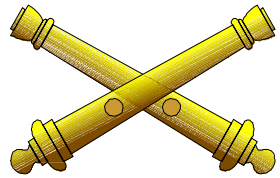
THE GUNS AND AC DID NOT MOVE!!

THE TICK MARK AND THE DF INDEX ON THE CHART MOVED!

SHD CHANGED

USAFAS

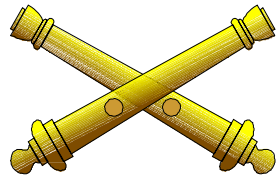
GUNNERY DEPARTMENT



AFU;REG;FU:_/1/A/1_/51_;SHL:HEA;LOT:M/Y;CHG:5;FZE:TID_;DELETE:_;
RG:_7964;RNGCR:__-36;TI:_28.2;TIMECR:-0.3;DEFLCR:R/__5;
STDMET:_;ANGLE:LOW_; ¾TGT:PR75XX;DTG:__/__/__;MET:_;SURP:X;SURT:_;MV:_;

U
S
A
F
A
S

GUNNERY DEPARTMENT



AFU;REG;FU:_/1/A/1_/51_;SHL:HEA;LOT:M/Y;CHG:5;FZE:TID_;DELETE:_;
RG:_7952;RNGCR:__-24;TI:_28.2;TIMECR:-0.3;DEFLCR:R/__0;
STDMET:_;ANGLE:LOW_; ¾TGT:PR75XX;DTG:__/__/__;MET:_;SURP:_;SURT:_;MV:_;

USAFAS

VERIFICATION MISSION
DHD = DHD

FM;CFF:_;TGTPR75XX;KNPT:01;CORD:543427/03839453/420__;GZ:___;RV:___;
OB:__;FST:__;DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;
LAS:____;TYPE:_____/_____;DOP:_____;SIZE:____/____;ATT:____;
CONT:____/FFE_;ME:____/___;TIME:__/__;MIS:_;PRI:_;PTM:_____;
ASF:___/____;SH:HEA/___;FZ:TID_/____;RDS:__;VOL:__;STR:____;
EOM:_;RAT:_;ASNFPF:_;UFFE:_/_/_/__/___,_/_/_/__/___; ¾
LOT:_/_;CHG:_;LOTS:M/Y/_/_;CHGS:5/_;FIRINT:___;
PTF:1___;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
SHEAF:____;VOLCMD:_;CSLOAD:_;RPT:_;

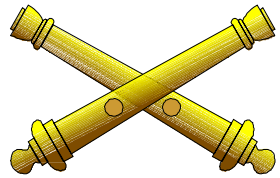
VERIFICATION MISSION
DHD = DHD

FM;CFF:_;TGTPR75XX;KNPT:01;CORD:543427/03839453/420__;GZ:___;RV:___;
OB:__;FST:__;DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;
LAS:____;TYPE:_____/_____;DOP:_____;SIZE:____/____;ATT:____;
CONT:____/FFE_;ME:____/___;TIME:__/__;MIS:_;PRI:_;PTM:_____;
ASF:___/____;SH:HEA/___;FZ:TID_/____;RDS:__;VOL:__;STR:____;
EOM:_;RAT:_;ASNFPF:_;UFFE:_/_/_/__/___,_/_/_/__/___; ¾
LOT:_/_;CHG:_;LOTS:M/Y/_/_;CHGS:5/_;FIRINT:___;
PTF:1___;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
SHEAF:____;VOLCMD:_;CSLOAD:_;RPT:_;

DHD: TI 28.2 DF 3238 QE 441

SUBSEQUENT MET TECHNIQUE

- ENTER NEW MET (CURRENTLY IN MET FILE #2)
- CHANGE PROP TEMP TO 85 °
- CONDUCT DRY FIRE MISSION AT REGISTRATION POINT TO DETERMINE NEW DHD DATA
- THIS DATA IS USED TO BRING BUCS ON-LINE WITH BCS
- DETERMINE NEW GFT SETTING AND TGPCs



DRY FIRE MISSION
DETRMINE NEW DHD

FM;CFF:_;TGTPR75XX;KNPT:01;CORD:543427/03839453/420__;GZ:___;RV:___;
OB:__;FST:__;DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;
LAS:____;TYPE:_____/_____;DOP:_____;SIZE:____/____;ATT:____;
CONT:____/FFE_;ME:____/___;TIME:__/__;MIS:_;PRI:_;PTM:_____;
ASF:___/____;SH:HEA/___;FZ:TID_/____;RDS:__;VOL:__;STR:____;
EOM:_;RAT:_;ASNFPF:_;UFFE:_/_/_/__/___,_/_/_/__/___; ¾
LOT:_/_;CHG:_;LOTS:M/Y/_/_;CHGS:5/_;FIRINT:___;
PTF:1___;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
SHEAF:____;VOLCMD:_;CSLOAD:_;RPT:_;

DRY FIRE MISSION
DETRMINE NEW DHD

FM;CFF:_;TGTPR75XX00;KNPT:01;CORD:543427/03839453/420__;GZ:___;RV:___;
OB:__;FST:__;DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;
LAS:____;TYPE:_____/_____;DOP:_____;SIZE:____/____;ATT:____;
CONT:____/FFE_;ME:____/___;TIME:__/__;MIS:_;PRI:_;PTM:_____;
ASF:___/____;SH:HEA/___;FZ:TID_/____;RDS:__;VOL:__;STR:____;
EOM:_;RAT:_;ASNFPF:_;UFFE:_/_/_/__/___,_/_/_/__/___; ¾
LOT:_/_;CHG:_;LOTS:M/Y/_/_;CHGS:5/_;FIRINT:___;
PTF:1___;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
SHEAF:____;VOLCMD:_;CSLOAD:_;RPT:_;

DHD: TI 28.1 DF 3238 QE 439

USAFAS

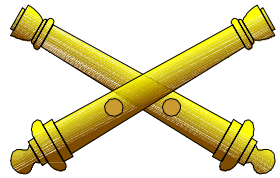
p. 5-46

HIGH BURST REGISTRATION

FIRE ORDER

ABBREVIATED HIGH BURST REGISTRATION AT GRID 3841 ALT 460, HOB 90, WITH FIST 70 AND 20, #2 , 4 RNDS, LOT M/T, CHG 7, FZ TIA, BRAMC

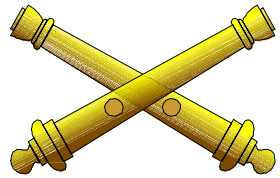
GUNNERY DEPARTMENT



_____;P:_;SB:_/_/_/__/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:X;RADAR:_;OBS:70/20;OBINFO:___/___;HOB:90__;
TGT:_____;CORD:38000_/41000___/460__;GZ:+14;
SHL:HEA;FZE:TID_;LOT:M/T;CHG:7;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:_/___/_/___;ELERR:____; ¾
ANGLE:____;PTF:2_;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

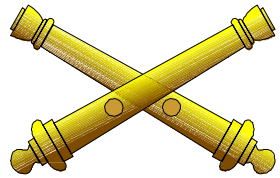
GUNNERY DEPARTMENT



_____;P:_;SB:F/I/S/70/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:HB_/YES;HOB:90__;
TGT:PR75XX;CORD:538000/03841000/_+460;GZ:+14;
SHL:HEA;FZE:TID_;LOT:M/T;CHG:7;RDT:4;INTERV:__;QE:_555;TOF:_44.2;
FU:_/1/A/1_/51_;PCORD:551440/03839624/_+420;PGZ:+14;MAXORD:_9828;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:4895/____/_+24;DFERR:_/___/_/___;ELERR:____; ¾
ANGLE:LOW_;PTF:2_;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT



_____;P:_;SB:F/I/S/20/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:HB_/___;HOB:90__;
TGT:PR75XX;CORD:538000/03841000/_+460;GZ:+14;
SHL:HEA;FZE:TID_;LOT:M/T;CHG:7;RDT:4;INTERV:__;QE:_555;TOF:_44.2;
FU:_/1/A/1_/51_;PCORD:551440/03839624/_+420;PGZ:+14;MAXORD:_9828;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/5842/_+10;DFERR:_/___/_/___;ELERR:____; ¾
ANGLE:LOW_;PTF:2_;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

DHD

TI 44.2 DF 3108 QE 555

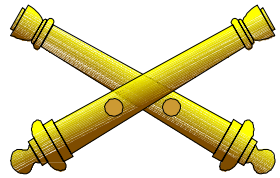
THE BCS REQUIRES DEFERR AND ELERR

DEFERR = SPOTTING AZ - ORIENTING AZ

ELERR = SPOTTING VA - ORIENTING VA

IF THE MISSION IS DIGITAL, THE FO DOES THE MATH.
IF THE MISSION IS VOICE, THE FDC DOES THE MATH.

GUNNERY DEPARTMENT



DEFERR = SPOTTING AZ - ORIENTING AZ

L2 = 4893 - 4895

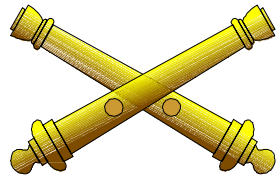
ELERR = SPOTTING VA - ORIENTING VA

+8 = (+32) - (+24)

_____;P:_;SB:F/I/S/70/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:___/___;HOB:____;
TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
SHL:___;FZE:____;LOT:_/_;CHG:_;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:L/2__/_/___;ELERR:+8__; ¾
ANGLE:____;PTF:__;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT



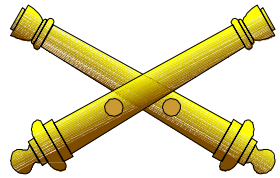
DEFERR = SPOTTING AZ - ORIENTING AZ

R14= 5856 - 5842

_____;P:_;SB:F/I/S/20/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:___/___;HOB:____;
TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
SHL:___;FZE:____;LOT:_/_;CHG:_;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:_/___/R/14_;ELERR:____; ¾
ANGLE:____;PTF:__;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT



DEFERR = SPOTTING AZ - ORIENTING AZ

L0 = 4895 - 4895

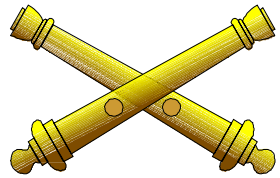
ELERR = SPOTTING VA - ORIENTING VA

+7 = (+31) - (+24)

_____;P:_;SB:F/I/S/70/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:___/___;HOB:____;
TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
SHL:___;FZE:____;LOT:_/_;CHG:_;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:L/0__/_/___;ELERR:+7__; ¾
ANGLE:____;PTF:__;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT



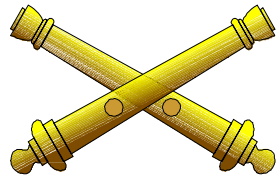
DEFERR = SPOTTING AZ - ORIENTING AZ

R10= 5852 - 5842

_____;P:_;SB:F/I/S/20/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:___/___;HOB:____;
TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
SHL:___;FZE:____;LOT:_/_;CHG:_;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:_/___/R/10_;ELERR:____; ¾
ANGLE:____;PTF:__;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT



DEFERR = SPOTTING AZ - ORIENTING AZ

L20 = 4875 - 4895

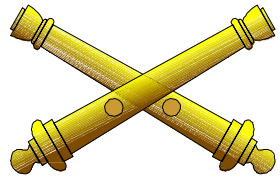
ELERR = SPOTTING VA - ORIENTING VA

+11 = (+35) - (+24)

_____;P:_;SB:F/I/S/70/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:___/___;HOB:____;
TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
SHL:___;FZE:____;LOT:_/_;CHG:_;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:L/20_/_/___;ELERR:+11_; ¾
ANGLE:____;PTF:__;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT



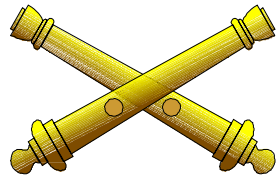
DEFERR = SPOTTING AZ - ORIENTING AZ

R24= 5866 - 5842

_____;P:_;SB:F/I/S/20/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:___/___;HOB:____;
TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
SHL:___;FZE:____;LOT:_/_;CHG:_;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:_/___/R/24_;ELERR:____; ¾
ANGLE:____;PTF:__;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT



DEFERR = SPOTTING AZ - ORIENTING AZ

R3 = 4898 - 4895

ELERR = SPOTTING VA - ORIENTING VA

+9 = (+33) - (+24)

_____;P:_;SB:F/I/S/70/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:___/___;HOB:____;
TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
SHL:___;FZE:____;LOT:_/_;CHG:_;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:R/3__/_/___;ELERR:+9__; ¾
ANGLE:____;PTF:__;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT

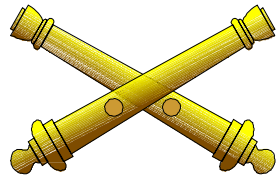
DEFERR = SPOTTING AZ - ORIENTING AZ

R16= 5858 - 5842

_____;P:_;SB:F/I/S/20/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:___/___;HOB:____;
TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
SHL:___;FZE:____;LOT:_/_;CHG:_;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:_/___/R/16_;ELERR:____; ¾
ANGLE:____;PTF:__;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT



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PED:__7;PER:_21;PEH:_20;REJ:_/_/3/_/_/_;EOM:_;
RD1:_-0.9/_+0.2/__0.0;RD2:_-1.5/_+1.4/_-0.2;RD3:_+5.0/_-2.6/_+0.1;
RD4:_-2.6/_+0.6/_+0.1;RD5:___._/___._/___._;RD6:___._/___._/___._;

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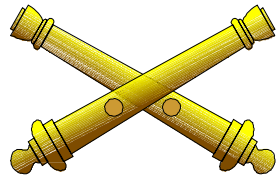
GUNNERY DEPARTMENT



DEFERR = SPOTTING AZ - ORIENTING AZ

L1 = 4894 - 4895

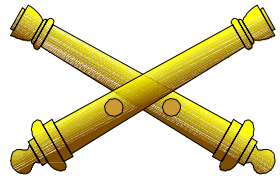
ELERR = SPOTTING VA - ORIENTING VA

+7 = (+31) - (+24)

_____;P:_;SB:F/I/S/70/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:___/___;HOB:____;
TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
SHL:___;FZE:____;LOT:_/_;CHG:_;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:L/1__/_/___;ELERR:+7__; ¾
ANGLE:____;PTF:__;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT



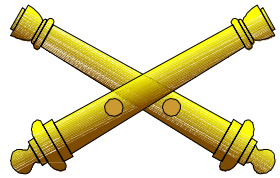
DEFERR = SPOTTING AZ - ORIENTING AZ

R14= 5856 - 5842

_____;P:_;SB:F/I/S/20/___;C:___;SG__,__;DTG:__/__/__;ID:____;A:_;_
FM;INTM;CAKKEY:__;INIT:_;RADAR:_;OBS:__/__;OBINFO:___/___;HOB:____;
TGT:PR75XX;CORD:_____/_____/_____;GZ:___;
SHL:___;FZE:____;LOT:_/_;CHG:_;RDT:_;INTERV:__;QE:____;TOF:___,_;
FU:_/_/_/__/___;PCORD:_____/_____/_____;PGZ:___;MAXORD:_____;
EOM:_;SITR:____/____;RDRVIS:_;RDRERR:___;RDRSUB:__;
AZREF:____/____/____;DFERR:_/___/R/14_;ELERR:____; ¾
ANGLE:____;PTF:__;ECRD:_____/_____/_____;EFU:_/_/_/__/___;

USAFAS

GUNNERY DEPARTMENT



FM;HBMPI;TGT:PR75XXCORD:538049/03840995/_+567;GZ:+14;SPHERE:1;
PED:__7;PER:_21PEH:_20;REJ:_/_/_/_/_/_;EOM:X;
RD1:_+0.7/_-0.3/_+0.0;RD2:_+0.0/_+0.6/_-0.1;RD3:_+0.3/_-0.2/_-0.1;
RD4:_-1.0/_-0.2/_+0.1;RD5:___._/___._/___._;RD6:___._/___._/___._;

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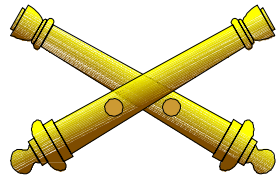
GUNNERY DEPARTMENT



AFU;REG;FU:_/1/A/1_/51_;SHL:HEA;LOT:M/T;CHG:7;FZE:TID_;DELETE:_;
RG:13467;RNGCR:__+28;TI:_44.2;TIMECR:+0.1;DEFLCR:R/__0;
STDMET:_;ANGLE:LOW_; ¾TGT:PR75XX;DTG:__/__/__;MET:_;SURP:_;SURT:_;MV:_;

USAFAS

VERIFICATION MISSION
DHD = DHD

FM;CFF:_;TGT_____;KNPT:__;CORD:538049/03840995/567__;GZ:___;RV:___;
OB:__;FST:__;DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;
LAS:____;TYPE:_____/_____;DOP:_____;SIZE:____/____;ATT:____;
CONT:____/FFE_;ME:____/___;TIME:__/__;MIS:_;PRI:_;PTM:_____;
ASF:___/____;SH:HEA/___;FZ:TID_/____;RDS:__;VOL:__;STR:____;
EOM:_;RAT:_;ASNFPF:_;UFFE:_/_/_/__/___,_/_/_/__/___; ¾
LOT:_/_;CHG:_;LOTS:M/T/_/_;CHGS:7/_;FIRINT:___;
PTF:2___;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
SHEAF:____;VOLCMD:_;CSLOAD:_;RPT:_;

VERIFICATION MISSION
DHD = DHD

FM;CFF:_;TGT_____;KNPT:__;CORD:538049/03840995/547__;GZ:___;RV:___;
OB:__;FST:__;DIR:____/__;DIST:____;SHIFT:_/____/_/____/_/____;
LAS:____;TYPE:_____/_____;DOP:_____;SIZE:____/____;ATT:____;
CONT:____/FFE_;ME:____/___;TIME:__/__;MIS:_;PRI:_;PTM:_____;
ASF:___/____;SH:HEA/___;FZ:TID_/____;RDS:__;VOL:__;STR:____;
EOM:_;RAT:_;ASNFPF:_;UFFE:_/_/_/__/___,_/_/_/__/___; ¾
LOT:_/_;CHG:_;LOTS:M/T/_/_;CHGS:7/_;FIRINT:___;
PTF:2___;SPTF:__/__/__/__;SHTF:_/_/_/_/_/_/_/_;
PFFE:____;SHFFE:_/_/_/_/_/_/_/_;
HOB:____;RG:_____;TOF:___._;MAXORD:_____;
SHEAF:____;VOLCMD:_;CSLOAD:_;RPT:_;

DHD: TI 44.2 DF 3108 QE 555

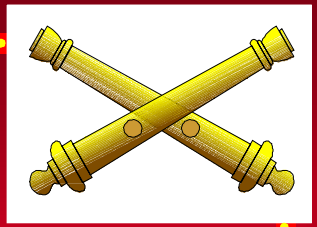
REQUIREMENTS TO TRANSFER POSITION CONSTANTS

- MUST BE ON COMMON SURVEY
- REGISTERING FDC MUST ACCOUNT FOR ALL MEASUREABLE NON-STANDARD CONDITIONS THAT AFFECTED THE HOWITZER AND PROJECTILE DURING THE REGISTRATION

DO YOU MEET THESE REQUIREMENTS?

YES!

GUNNERY DEPARTMENT



THE KING OF BATTLE

USAFAS

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1						
#2						
#3						
#4						

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R					
#2						
#3						
#4						

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R					
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R					
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R					
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R					

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s				
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R					
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R					
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R					

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s				
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)				
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R					
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R					

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s				
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)				
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 4 -3.1 m/s				
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 5, -4.4 m/s				

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s	HEA, Lot E, 5, -2.5 HEA, Lot L, 5, -2.3 HEL, Lot W, 5, +0.2			
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)				
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 4 -3.1 m/s				
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 5, -4.4 m/s				

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

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BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s	HEA, Lot E, 5, -2.5 HEA, Lot L, 5, -2.3 HEL, Lot W, 5, +0.2			
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)	HEA -8.2 (AM-2) HEL -8.6 (AN-1)			
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 4 -3.1 m/s				
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 5, -4.4 m/s				

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

USAFAS

BCS MVV APPLICATION/ CORRECTION WORKSHEET

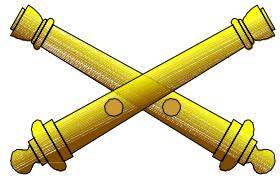
	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s	HEA, Lot E, 5, -2.5 HEA, Lot L, 5, -2.3 HEL, Lot W, 5, +0.2			
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)	HEA -8.2 (AM-2) HEL -8.6 (AN-1)			
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 4 -3.1 m/s	HEA, Lot G, 4, -3.1 HEA, Lot E, 5, +2.7 HEA, Lot L, 5, +3.0 HEL, Lot W, 5, +1.1			
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 5, -4.4 m/s	HEA, Lot E, 4, -6.4 HEA, Lot G, 5, -4.4 HEA, Lot L, 6, +4.7 HEL, Lot W, 6, -9.9			

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s	HEA, Lot E, 5, -2.5 HEA, Lot L, 5, -2.3 HEL, Lot W, 5, +0.2	HEA M3A1 Lot E Chg 5 -2.5 m/s		
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)	HEA -8.2 (AM-2) HEL -8.6 (AN-1)			
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 4 -3.1 m/s	HEA, Lot G, 4, -3.1 HEA, Lot E, 5, +2.7 HEA, Lot L, 5, +3.0 HEL, Lot W, 5, +1.1			
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 5, -4.4 m/s	HEA, Lot E, 4, -6.4 HEA, Lot G, 5, -4.4 HEA, Lot L, 6, +4.7 HEL, Lot W, 6, -9.9			

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4



BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s	HEA, Lot E, 5, -2.5 HEA, Lot L, 5, -2.3 HEL, Lot W, 5, +0.2	HEA M3A1 Lot E Chg 5 -2.5 m/s		
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)	HEA -8.2 (AM-2) HEL -8.6 (AN-1)	HEA, M3A1 Chg 4 -8.2 m/s		
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 4 -3.1 m/s	HEA, Lot G, 4, -3.1 HEA, Lot E, 5, +2.7 HEA, Lot L, 5, +3.0 HEL, Lot W, 5, +1.1	HEA M3A1 Lot G Chg 4 -3.1 m/s		
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 5, -4.4 m/s	HEA, Lot E, 4, -6.4 HEA, Lot G, 5, -4.4 HEA, Lot L, 6, +4.7 HEL, Lot W, 6, -9.9	HEA M3A1 Lot E Chg 4 -6.4 m/s		

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s	HEA, Lot E, 5, -2.5 HEA, Lot L, 5, -2.3 HEL, Lot W, 5, +0.2	HEA M3A1 Lot E Chg 5 -2.5 m/s	YES	
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)	HEA -8.2 (AM-2) HEL -8.6 (AN-1)	HEA, M3A1 Chg 4 -8.2 m/s		
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 4 -3.1 m/s	HEA, Lot G, 4, -3.1 HEA, Lot E, 5, +2.7 HEA, Lot L, 5, +3.0 HEL, Lot W, 5, +1.1	HEA M3A1 Lot G Chg 4 -3.1 m/s		
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 5, -4.4 m/s	HEA, Lot E, 4, -6.4 HEA, Lot G, 5, -4.4 HEA, Lot L, 6, +4.7 HEL, Lot W, 6, -9.9	HEA M3A1 Lot E Chg 4 -6.4 m/s		

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

USAFAS

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s	HEA, Lot E, 5, -2.5 HEA, Lot L, 5, -2.3 HEL, Lot W, 5, +0.2	HEA M3A1 Lot E Chg 5 -2.5 m/s	YES	
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)	HEA -8.2 (AM-2) HEL -8.6 (AN-1)	HEA, M3A1 Chg 4 -8.2 m/s	YES	
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 4 -3.1 m/s	HEA, Lot G, 4, -3.1 HEA, Lot E, 5, +2.7 HEA, Lot L, 5, +3.0 HEL, Lot W, 5, +1.1	HEA M3A1 Lot G Chg 4 -3.1 m/s	YES	
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 5, -4.4 m/s	HEA, Lot E, 4, -6.4 HEA, Lot G, 5, -4.4 HEA, Lot L, 6, +4.7 HEL, Lot W, 6, -9.9	HEA M3A1 Lot E Chg 4 -6.4 m/s	NO	

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s	HEA, Lot E, 5, -2.5 HEA, Lot L, 5, -2.3 HEL, Lot W, 5, +0.2	HEA M3A1 Lot E Chg 5 -2.5 m/s	YES	NONE
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)	HEA -8.2 (AM-2) HEL -8.6 (AN-1)	HEA, M3A1 Chg 4 -8.2 m/s	YES	
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 4 -3.1 m/s	HEA, Lot G, 4, -3.1 HEA, Lot E, 5, +2.7 HEA, Lot L, 5, +3.0 HEL, Lot W, 5, +1.1	HEA M3A1 Lot G Chg 4 -3.1 m/s	YES	
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 5, -4.4 m/s	HEA, Lot E, 4, -6.4 HEA, Lot G, 5, -4.4 HEA, Lot L, 6, +4.7 HEL, Lot W, 6, -9.9	HEA M3A1 Lot E Chg 4 -6.4 m/s	NO	

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4

USAFAS

BCS MVV APPLICATION/ CORRECTION WORKSHEET

	Propellant Lot on gun	MVV FDO should apply from logbook to fire mission * Fire CMD STDS may dictate	MVV Data actually in BCS;MVV file	MVV applied by BCS to fire mission	Did the BCS Apply the Correct MVV?	MVVs that need to be deleted, modified, or added in BCS
#1	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, Chg 5, -2.5m/s	HEA, Lot E, 5, -2.5 HEA, Lot L, 5, -2.3 HEL, Lot W, 5, +0.2	HEA M3A1 Lot E Chg 5 -2.5 m/s	YES	NONE
#2	M3A1 Lot E M4A2 Lot W M4A2 Lot L M119A1 Lot R	HEA, M3A1, Lot E, SS= -8.2 m/s (AM-2 TFT)	HEA -8.2 (AM-2) HEL -8.6 (AN-1)	HEA, M3A1 Chg 4 -8.2 m/s	YES	NONE (Verify SS)
#3	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 4 -3.1 m/s	HEA, Lot G, 4, -3.1 HEA, Lot E, 5, +2.7 HEA, Lot L, 5, +3.0 HEL, Lot W, 5, +1.1	HEA M3A1 Lot G Chg 4 -3.1 m/s	YES	**DELETE** M3A1, Lot E, +2.7 M4A2, Lot L, +3.0
#4	M3A1 Lot G M4A2 Lot W M119A1 Lot R	HEA, M3A1, Lot G, Chg 5, -4.4 m/s	HEA, Lot E, 4, -6.4 HEA, Lot G, 5, -4.4 HEA, Lot L, 6, +4.7 HEL, Lot W, 6, -9.9	HEA M3A1 Lot E Chg 4 -6.4 m/s	NO	**DELETE** M3A1, Lot E, -6.4 M4A2, Lot L, +4.7

FIRE MISSION DATA: FFE, SMA, LOT W/G, CHG 4