

**BASIC FIRE DIRECTION CENTER  
INITIAL ASSESSMENT**

**SAFETY DIAGRAM**

M889A1  
MIN RANGE 1000  
MAX RANGE 5400  
LEFT LAT LIMIT 5950  
RIGHT LAT LIMIT 0600  
REF DEF 2800  
GRID 7990 3510

**PIVOT POINT**

You are a primary plotter for an 81mm mortar section. You are enroute to your position when you receive the following call for fire. "Orion this is Viper adjust fire over, grid 5518 9315 over, squad in the open over." Your position is at grid 5616 9410 with an altitude of 500m. Your referred deflection is 3200. The target prefix you will be using is AB with target numbers 1010-1020. Your FO is Viper located at grid 5673 9395. On hand you have 300 M821A1. With the given information set up a Pivot Point.

AB1010  
(4RDS IN EFFECT)

OT DIRECTION 4320 OVER  
RIGHT 200 ADD 200 OVER  
LEFT 50 DROP 50 OVER  
FFE OVER  
EOM 30% CAS

**BELOW PIVOT POINT**

You are a primary plotter for an 81mm mortar section. You are enroute to your position when you receive the following call for fire. "Orion this is Beowulf adjust fire over, grid 5466 9362 over, squad in the open over." Your position is at grid 5320 9684. Your referred deflection is 0700. The target prefix you will be using is CD with target numbers 2020-2050. On hand you have 200 M821A1. With the given information set up a Below Pivot Point.

CD2020  
(3RDS IN EFFECT)

OT DIRECTION 2330 OVER  
RIGHT 100 DROP 150 OVER  
DROP 50 FFE OVER  
EOM 70% CAS

### **MODIFIED OBSERVER**

You are a primary plotter for an 81mm mortar section. Your call sign is Orion. Your position is at grid 5392 9175 with an altitude of 550m. Your FDC chief determines your grid index to be 53/94. Your mounting azimuth is 5850 with a referred deflection of 2800. The target prefix you will be using is AC with target numbers 1000-1010. Your FO Avenger is located at 5222 9222 with an altitude of 450m. On hand you have 100 M889A1. With the given information set up a modified observed firing chart.

AC1000  
(3RDS IN EFFECT)

ORION THIS IS AVENGER ADJUST FIRE OVER  
GRID 5186 9531 ALT 550M OVER  
SQUAD IN THE OPEN OVER  
OT DIRECTION 6280 OVER  
RIGHT 150 DROP 200 OVER  
RIGHT 50 ADD 25  
FFE OVER  
EOM 30% CAS OVER

### **SURVEYED FIRING CHART**

You are a primary plotter for an 81mm mortar platoon. Your section leader determines your position to be 5310 9415 with an altitude of 600 meters. The FDC chief determines that your grid index is 55/95. The grid to your registration point is 5554 9578 with an altitude of 500 meters. The referred deflection is 3200. The FO is Beowulf at grid 5372 9613 with an altitude of 600 meters. You have 105 M889A1 HE. AR will be your target prefix and 1000-1010 will be your target numbers. Using the given information set up a surveyed firing chart and complete the registration.

RP1

BEOWULF THIS IS ORION PREPARE TO REGISTER RP1 OVER  
DIRECTION 1790 OVER  
RIGHT 100 ADD 200 OVER  
RIGHT 25 DROP 25 OVER  
REGISTRATION COMPLETE OVER  
GUN 1 RIGHT 20, GUN 3 ADJ, GUN 4 LEFT 10 OVER

