



Create Range Cards for Land Operations

Joe Bayles

Demo Theater

Agenda

- **Introduction**
- **Create Range Cards Demo**
- **Questions**

Introduction

- Based on Department of the Army Form 5517-R, Standard Range Card
- Sector sketch for a direct fire weapon system
- Used to plan and control fires and target acquisition
- Plots target areas and terrain features
- Combined to create the unit's sector sketch
- Other versions of Range Cards vary by organization

STANDARD RANGE CARD
For use of the form see Para 3-21.71, the precision agency is TM0000.

SQUAD _____
PLatoon _____
COMPANY _____

May be used for all types of direct fire weapons.

MAGNETIC NORTH

DATA SECTION

POSITION IDENTIFICATION _____ DATE _____

WEAPON _____ EACH CIRCLE EQUALS _____ METERS _____

NO.	DIRECTION/DEFLECTION	ELEVATION	RANGE	AMMO	DESCRIPTION

REMARKS _____

DA FORM 5517-R, FEB 1988

Important Concepts

- **Sectors of fire** – piece of the battlefield for which that gunner is responsible
- **Target Reference Points** – natural/man-made features designated for target acquisition and range determination
- **Dead Space** – any area that cannot be observed within a sector of fire
- **Maximum Engagement Line** – depth of the area and limited to maximum effective range of the weapon system
- **Weapons Reference Point** – easily recognizable terrain feature for plotting a weapon position

Create Range Cards

Joe Bayles

SQ.D:
P.L.T
CO:

RANGE CARD



Position Identification:					Date:
Weapon:					Each circle equals _____ meters.
ID.	Direction	Elevation	Range	Ammo	Description
	[empty]				Left Sector Limit
	[empty]				Right Sector Limit
Remarks:					

Known Issues

We're always looking to improve...

- **Model Builder Issue: !gridcode! vs. !grid_code!**
- **Sketching dead space vs. running a visibility tool**
- **No Maximum Engagement Line**
- **Support for multiple weapon systems**
- **Lack of guidance and outdated references**
 - **DA 5517-R references FM 3-21.71, which is now ATTP 3-21.71**
 - **ATTP 3-21.71 references FM 3-21.75, which is now outdated**

Resources

- **Solutions Page (download the template)**
 - <http://solutions.arcgis.com/military/land-operations/planning/>
- **Resources Page (the closest thing to the user manual)**
 - <http://resources.arcgis.com/>
- **Ideas Page (usually for improvement)**
 - <http://ideas.arcgis.com/>

Thank you...

- **Please fill out the session survey-**
 - **Offering ID: 1892**
- **Questions-**
 - **Now's the time to ask, or you could...**
 - **Please come ask me directly**
 - **Email me at jbayles@esri.com**
 - **Contact your Account Manager**



Understanding our world.