

MSE fielding

by Col. A. R. McCahan

Fielding MSE will radically change the way we do business--and it is a healthy and much needed change.

To properly examine MSE fielding, we must look first at the fielding development background. The fielding concept grew out of the fielding and training strategy that was formulated during a CONTACT 84 seminar. From the initial work done in the seminar, SIGCEN Department of Training and Doctrine, New Systems Training Division, developed the strategy in cooperation with the Army National Guard advisor and the TSM-MSE. After receiving appropriate approvals, the fielding and training strategy was presented to all the major Army commands and finally approved as a concept by a Department of the Army Council of Colonels on 8 March 1985. The concept was approved on 10 March 1985 by the Army vice chief of staff as the DA MSE Action Plan and further validated during the MSE Force Integration Review (FIR) initiated in July 1985. As much as possible, provisions of both the fielding and training strategy and the FIR were considered during the MSE contract negotiations and evaluation board deliberations.

When fielded, MSE, which was baselined against the DA approved program, will consist of 5 corps, 28 divisions, and 16 separate brigades. These organizations will include both Active Army and National Guard units as well as one USAR brigade. They will also include combat, combat support, and combat service support units—both Signal and non-Signal. The initial guidance was to field one corps each year, and as can be seen in Figure 1, that guidance is basically being followed.

The only exceptions to the guidance will be in III Corps and VII Corps. In III Corps, the 1st Cavalry Division will be equipped with MSE and will participate in a follow-on test and evaluation (FOTE) prior to the Option Year 3 decision; the FOTE is designed to satisfy congressional concerns that MSE will meet the Army's objectives. The 1st Cavalry Division will be the only organization to undergo an FOTE. Assuming a successful report out on the FOTE, fielding for the remainder of III Corps units will be complete by March 1990.

CORPS	START	FINISH
III Corps	February 88	March 90
V Corps	March 90	December 90
VII Corps	December 90	January 92
XVIII Corps	January 92	November 92
I Corps	November 92	November 93

Figure 1. Fielding sequence

Basic Year	Option Year 1	Option Year 2	Option Year 3	Option Year 4	Option Year 5	Option Year 6
1st Cav Div (FOTE)	Area Co and training	10*	12*	12*	11*	11*

*Number of battalions to be fielded

Figure 2. Provisional MSE equipment delivery schedule

Since VII Corps will be composed of an eight division equivalent force, fielding for it will take longer than for a five division corps.

The basic year contract was signed on 19 December 1985, and the Option Year 1 contract was signed on 31 December 1985. The next scheduled contract signings are March 1987 for Option Year 2 and September 1988 (assuming a successful FOTE) for Option Year 3. Option Year 6 has been developed by the contractor at the Army's request against an unspecified requirement in anticipation that additional MSE equipment will be required.

Before MSE is fielded, we need to know the specific equipment to allocate against each receiving unit, down to unit identification code (UIC) level of detail. Since MSE is to be fielded using the total package/unit materiel fielding (TP/UMF) concept, a methodology based on coherent unit sets (CUSs) was developed. A CUS refers to the total MSE that a given unit will receive. The amount of

equipment to be allocated to each unit is based on the operational and organizational plan (OOP) for MSE, which was adjusted to reflect the proposed GTE system. From that, 426 CUSs were developed. Coherent unit sets will be assigned to various levels, including divisions, corps Signal battalions, and separate brigades. The tabulation of CUSs will include such information as the UIC, designator, type of unit, TOE number, location, parent division/brigade, corps, and amount of specific equipment allocated.

Next, since the MSE is being built by both U.S. and foreign manufacturers, we needed a plan that would allow us to gather the MSE subsystem elements at one location so that they could be assembled in CUSs before being issued to the gaining unit. Provisions will have to be made for fielding at sites in the continental U.S. as well as in Alaska, Hawaii, Korea, and Germany.

The effort needed to field MSE in a division or corps Signal battalion will be considerably greater than that needed to field it in an infantry battalion, which will receive only two mobile subscriber radio terminals (MSRTs). For one thing, the entire Signal battalion table of organization and equipment (TOE) will need to be changed. Also, training on the new MSE will take place almost simultaneously with the fielding. The culmination of the training will be a week-long, contractor assisted field training exercise (FTX), which, if successful, will result in the unit being designated as an MSE operational unit.

As you can see in Figure 3, many things need to be done in order to prepare the field to receive MSE and to complete the paper documentation audit trail.

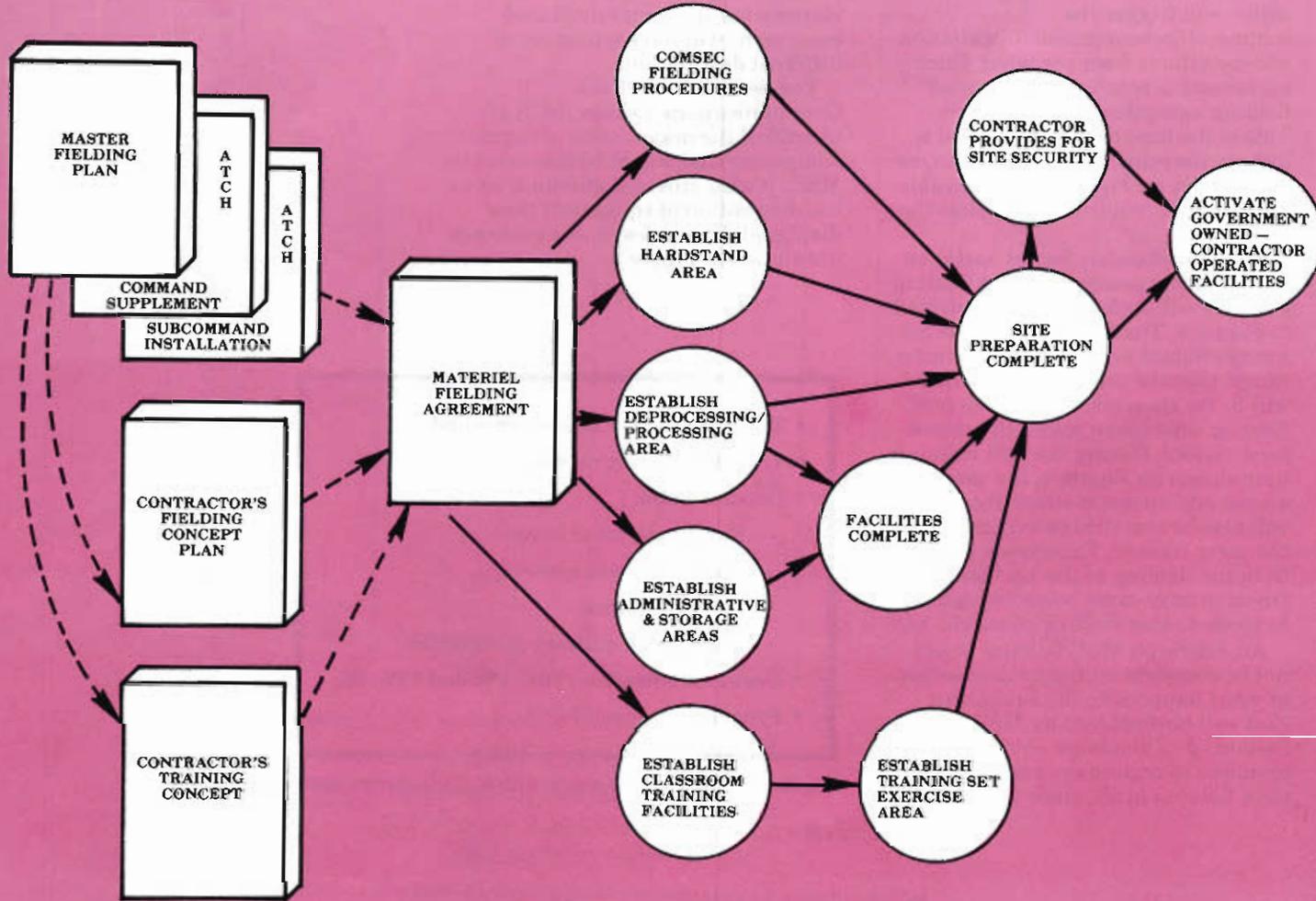


Figure 3. Fielding site—preparation and activation

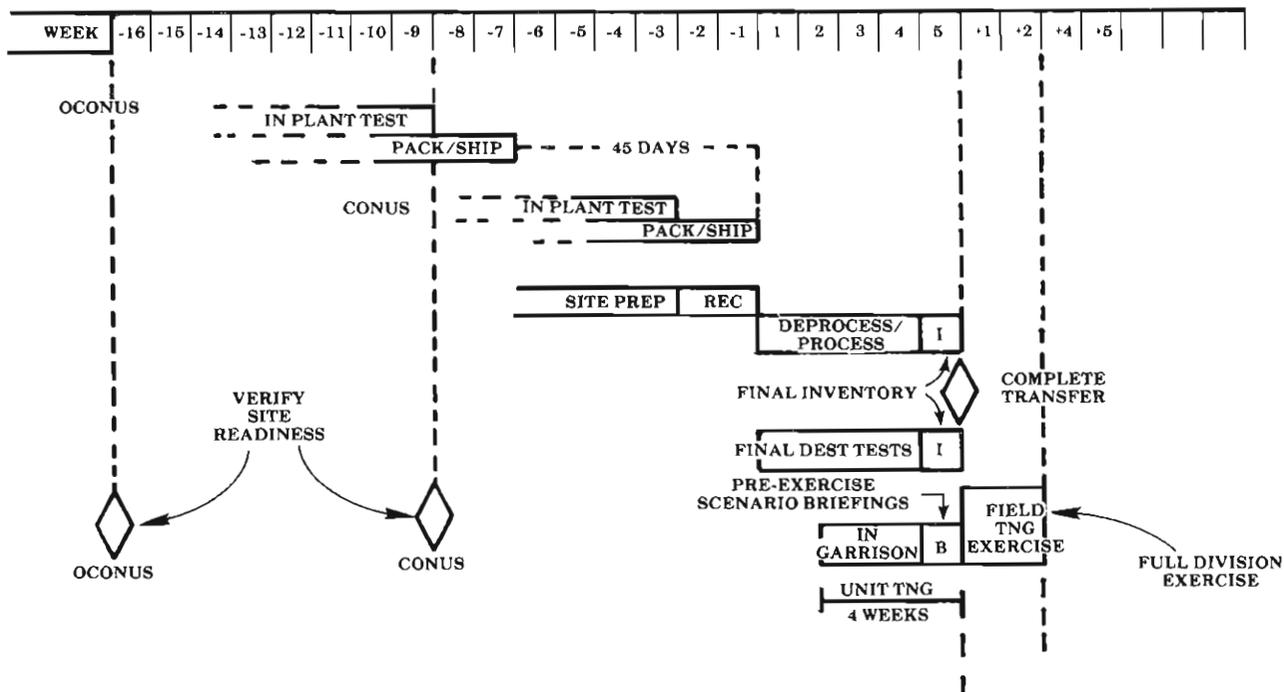


Figure 4. Typical fielding schedule of a division Signal battalion

Master materiel fielding plans, which will trigger the command/subcommand/installation addenda, have been prepared. Once agreement is reached, the materiel fielding agreement will be signed. This is the base document needed to initiate the other activities. Again, as you can see on Figure 3, considerable effort will be required to complete the facilities.

From the division Signal battalion commander's perspective, the fielding schedule will look like that illustrated in Figure 4. The fielding schedule for a corps Signal unit looks very similar, except that the unit training period will be for six weeks, and the actual fielding time seven weeks (five weeks for division). During the unit training time shown on Figure 4, the user owned and operated subscriber sets will also be installed in vehicles, and the users trained. Experience gained from the fielding of the 1st Cavalry Division may cause some changes to be made to this fielding schedule.

An article on MSE fielding would not be complete without a discussion of what happens to the equipment that will be displaced by MSE. Disposing of displaced equipment promises to require even more effort than fielding MSE, since the Army

(and not the contractor) will be responsible, and since displaced equipment will have a number of different destinations.

The Second Battlefield Communications Review (BCR II) identified the major items of Signal equipment that would be displaced by MSE. It also provided guidance as to the disposition of equipment thus displaced. Examples of this guidance are shown in Figure 5.

- Transfers within major command
- Transfers to war reserve
- Depot rebuild:
 - Enroute to other units
 - Enroute to war reserve
 - For depot stock
 - For foreign military sales (FMS)
- Depot modification (TRC-138 and TTC-39)
- Property disposal (PDO)

Figure 5. Anticipated destination of displaced equipment

There are approximately 2,300 major host communications system components that will be displaced by MSE. Figure 6 illustrates the number of depot turn-ins for rebuild and shows disposition after rebuild.

The DA deputy chief of staff for logistics (DCSLOG) has already issued general guidance for the turn-in/transfer of equipment; the detailed work of determining exactly how that will happen is now underway. Although accountability and monetary liability must be maintained, some other aspects of the turn-in likely will be relaxed.

The same sort of documentation and audit trail planned for MSE will also be developed and maintained for the displaced equipment. And it will be done in accordance with the redistribution scheme of BCR II with full recognition that the number of personnel assigned to the Signal

battalion will decrease. The displaced equipment should be out of the unit's area no later than about 90 days after it receives MSE.

The next several years are going to be exciting times in the Signal Corps as we take a revolutionary jump forward in the Army modernization effort. Fielding MSE will radically change the way we do business—and it is a healthy and much needed change.

Col. McCahan, who retired from the Army on 30 June 1986 with 26 years of service, had been the TRADOC systems manager for MSE at Fort Gordon, Ga., since 1 November 1984. Prior to that he had served as TSM-SATCOM. He received a B.S. in industrial management from Clemson and was commissioned as a Distinguished Military Graduate. Col. McCahan has received the following decorations and awards: BSM, JMSM, MSM (2 OLC), ACM, MVC (2 OLC), and Parachutist. He also received the Legion of Merit award in June of 1986.

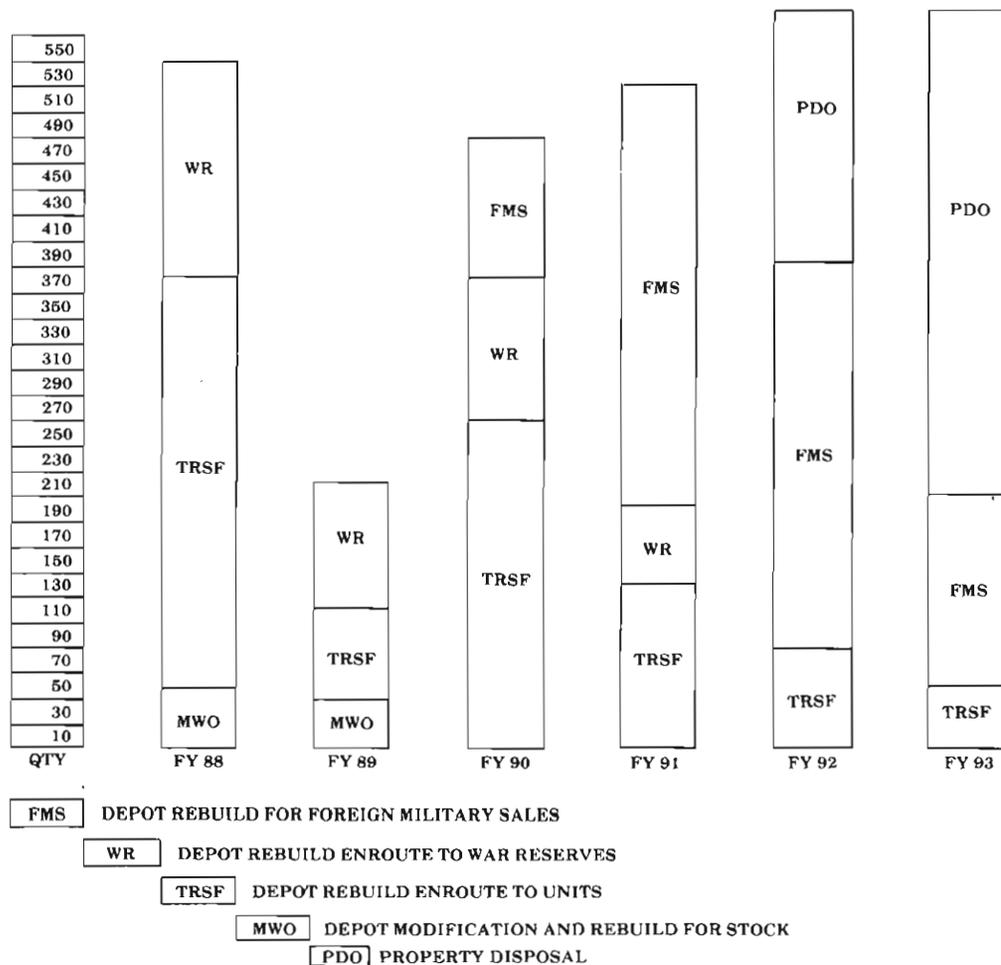


Figure 6. Anticipated quantity and disposition patterns of depot rebuilds