

Book Reviews

Samuel B. Magill, *Editor*

Why System Engineering

by Robert E. Corrigan, Ph.D. and
Roger A. Kaufman, Ph.D.

Published by Fearon Publishers,
Palo Alto, California
\$1.75 Paperback 71 pp

Query: what can be done to get line supervisors of a big manufacturing organization to accept a new control technique which they instinctively mistrust?

Of course, there's telling, and showing, or issuing a directive from the front office, or even just installing it and waiting for the squawks to begin.

Now, then, suppose you knew about programmed instruction, were enthusiastic about it, and wanted to show others how easy and effective it is to use. Granted these conditions, what do you think would be the chances of your coming up with a program on the subject. Something about sixty frames long, say?

This amiable little excursion in serendipity actually happened at the Douglas Aircraft Company in Long Beach, California. Some resistance had developed to the efforts of the System Engineers and it seemed like a good idea to explain their proce-

dures to the rank and file. The book has since been tried out on other supervisors, under different circumstances, and it seems to work very well.

S.B.M.

Learning Machines

by Nils J. Nilsson

McGraw-Hill Systems Science Series
\$10.00 1965 137 pp

There was a time when the training specialist accepted as an article of faith the fact that he knew more about "communications" than any other professional.

Even now, many of us believe that "training" and "learning" are best done by a flesh-and-blood trainer.

This book could conceivably be humbling to the ego because it destroys belief in the exclusively human basis for these processes. That is, if the reader can understand it. I can't. I can't even argue with it.

The author describes TLU's—threshold logic units; adalines, or adaptive linear devices; and madalines, which are multiple adalines.

Want a formula for training? Here is one:

$$W' = W - c Y.$$

Where W' is the trained organism (Nilsson calls this the trained "weight vector").

W is the pre-trained weight vector
 c is a correction increment

Y is the augmented pattern vector
induced by training

Now, you take it from there.

S.B.M.

Tell advertisers that you saw it in the
Training and Development Journal!
