

A CHALLENGE

**OFFICE OF PRODUCTION MANAGEMENT
TRAINING WITHIN INDUSTRY
Labor Division
SOCIAL SECURITY BUILDING, WASHINGTON, D.C.**



A CHALLENGE



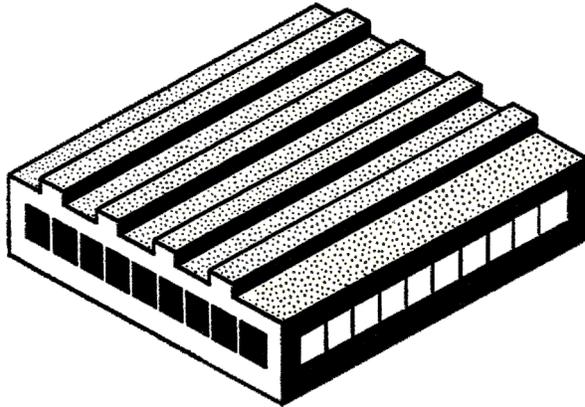
**UNITED STATES GOVERNMENT PRINTING OFFICE
1941**

**EVERY TOP EXECUTIVE
OF A DEFENSE PLANT
FACES THIS CHALLENGE:**

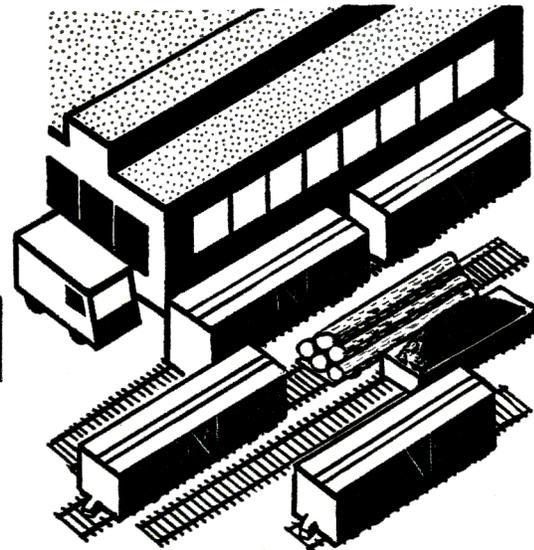
**Get out production on time...
with the smallest possible waste
... and no sacrifice of quality!**

IT'S NOT ENOUGH

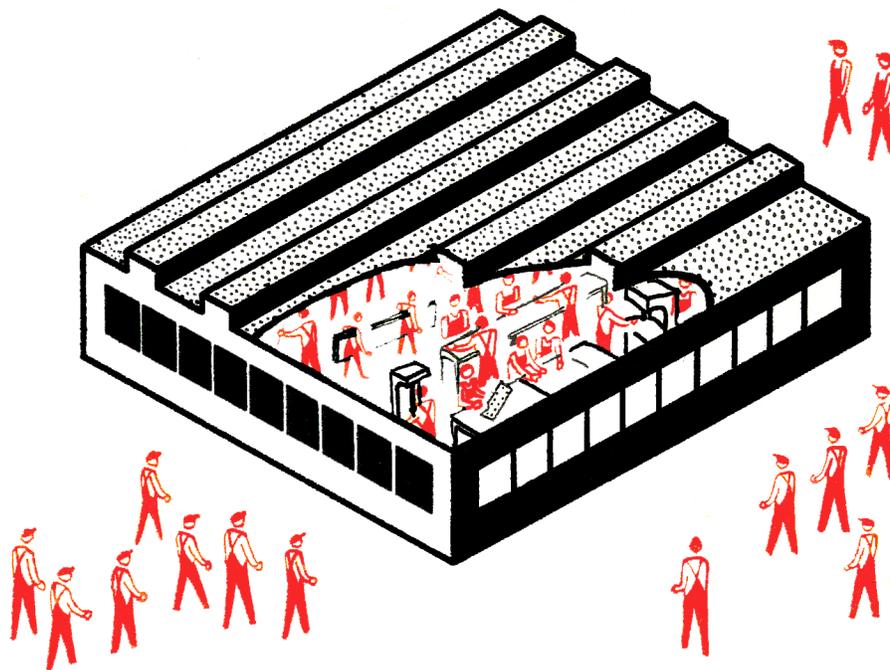
to have



a plant



and materials



there must also be enough workers



TIME IS SHORT



THERE ISN' T TIME

to let workers learn

as best they can.

THEY MUST BE TAUGHT

by methods . . .

that develop competent

workers rapidly



TIME IS SHORT



**TO GET
ENOUGH
WORKERS**

into action quickly ...

you need TRAINING!

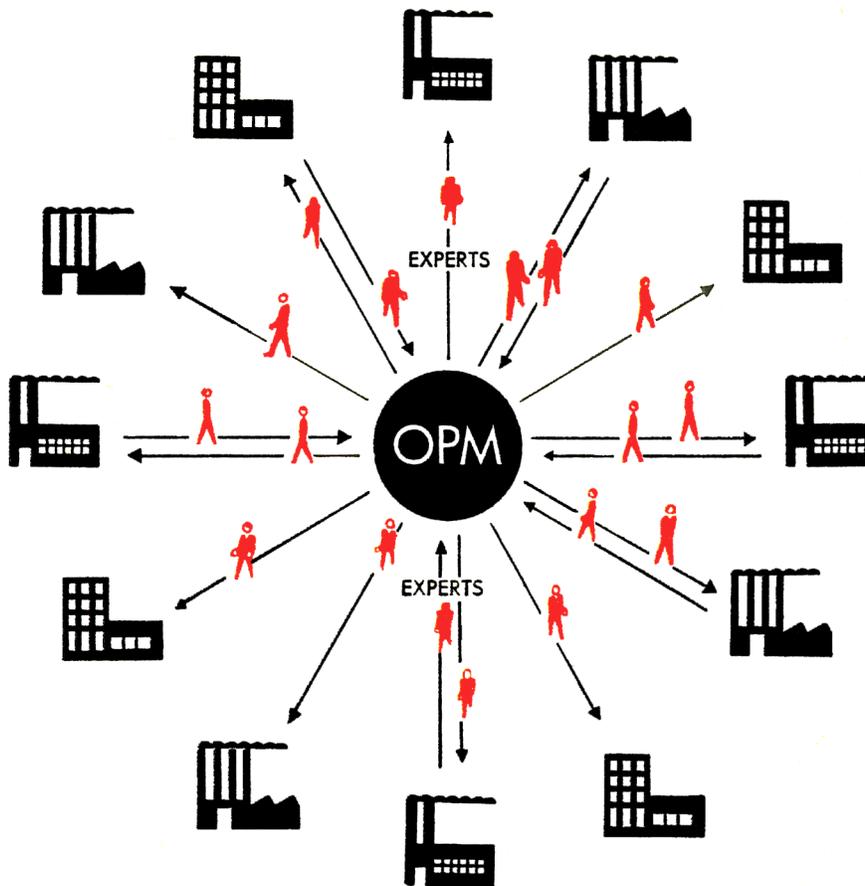
**Even a shortage of
all around craftsmen ...
can be overcome by training
and related steps**

SINCE THE NEED IS SO URGENT...

the Office of Production Management has
borrowed training and personnel experts

FROM INDUSTRY

so every defense manufacturer may have the
best experience this country can offer



THESE MEN FORM...

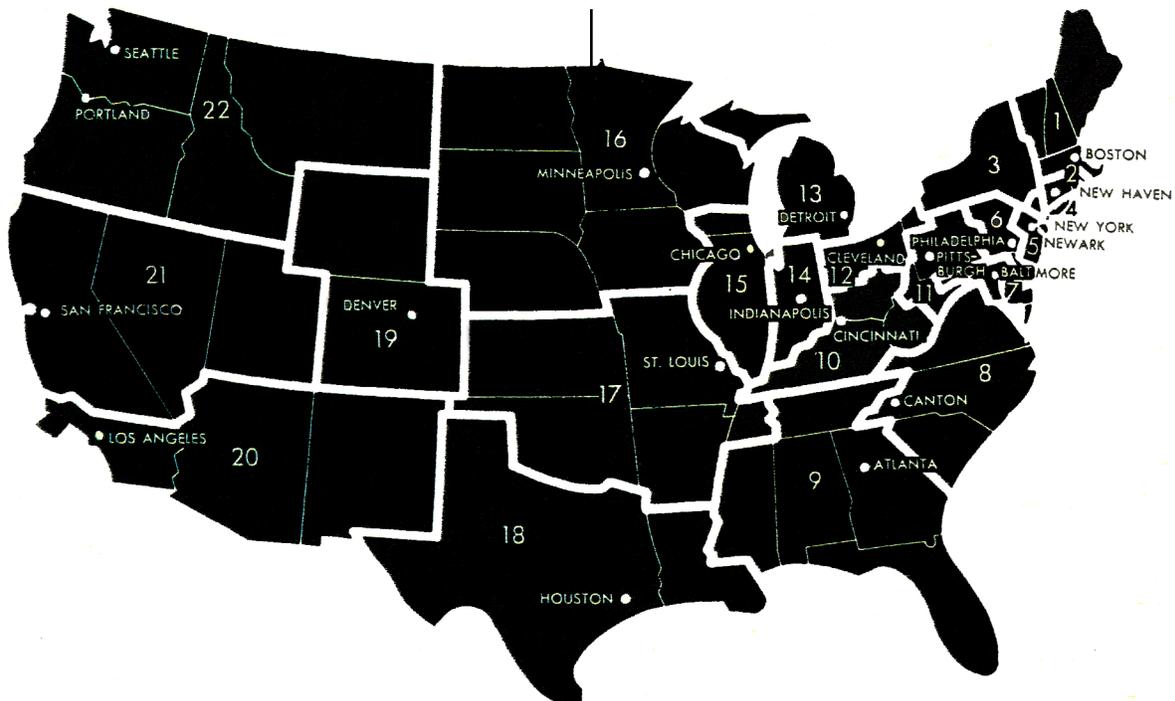
the TRAINING WITHIN

INDUSTRY BRANCH

of the Labor Division of OPM



22 DISTRICT OFFICES



WHEREVER YOU ARE . . .

THERE IS

NEAR YOU . . .

A CONSULTANT

**He will gladly help you with your
man-power and training problems**



**THESE NEARBY
TRAINING
and PRODUCTION
CONSULTANTS**

are prepared to serve you:

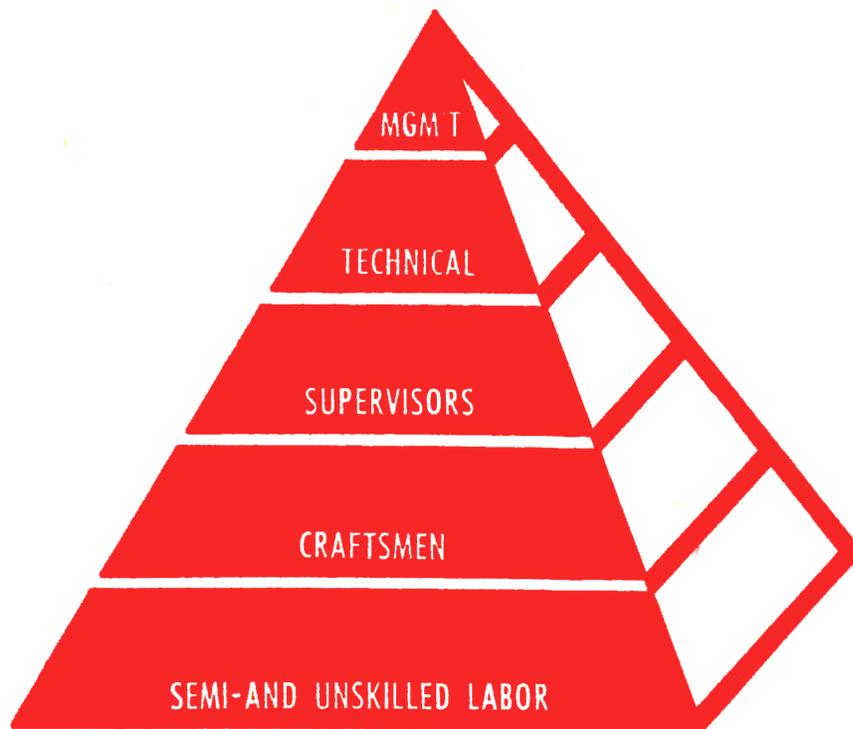
WHAT IS **THE BEST WAY
TO APPROACH THE
TRAINING PROBLEM
IN YOUR PLANT?**

**Here are some things
to be considered . . .**

IN MOST PLANTS

there are . . .

several kinds of employees

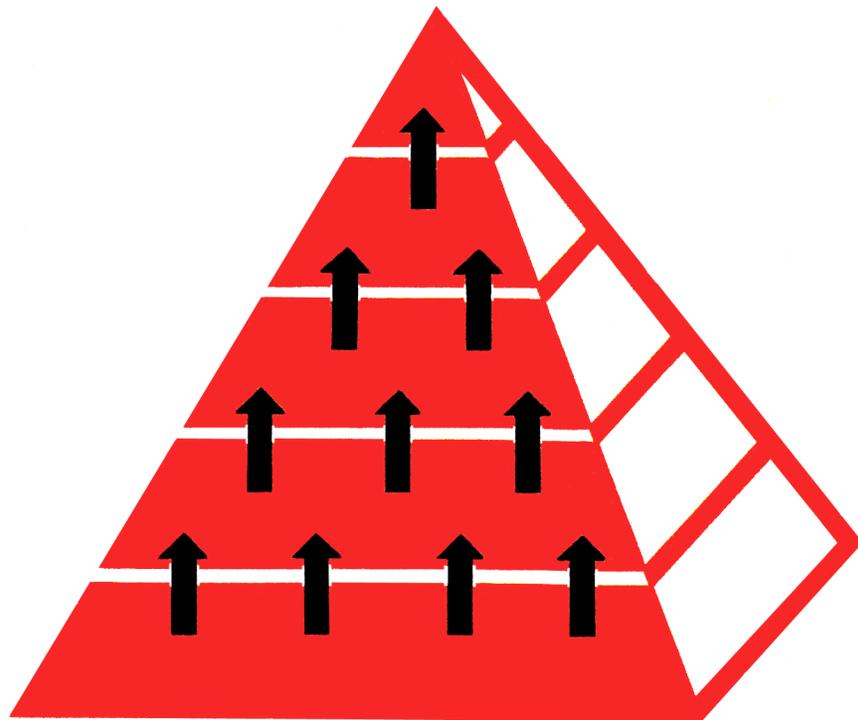


THE LAYERS show roughly . . .

how many there are of each kind . . .

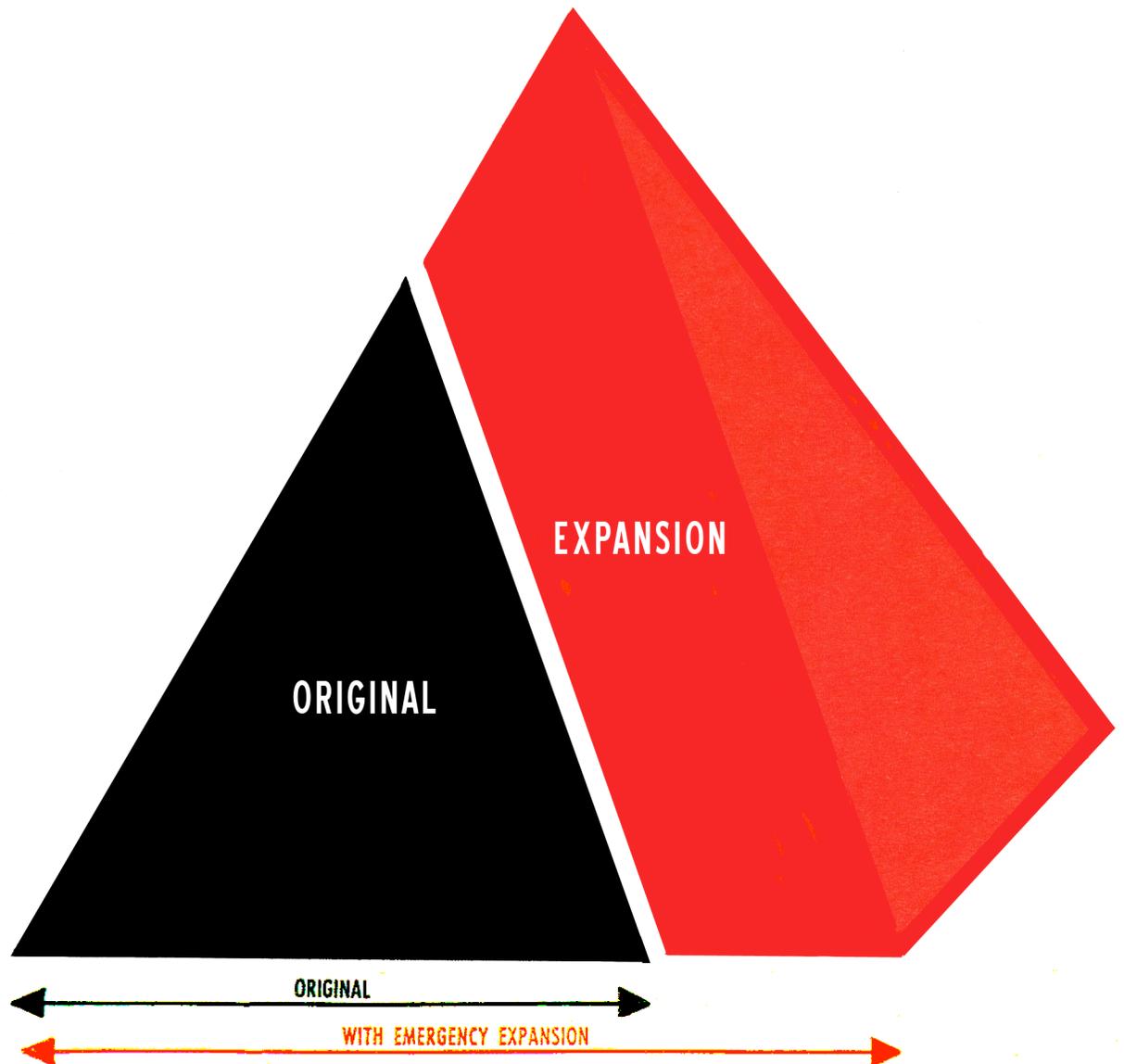
IN NORMAL TIMES

**jobs are usually filled
by advancement
within the organization**



BUT IN THE PRESENT EMERGENCY . . .

the working force
expands rapidly—



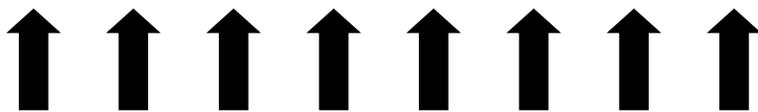
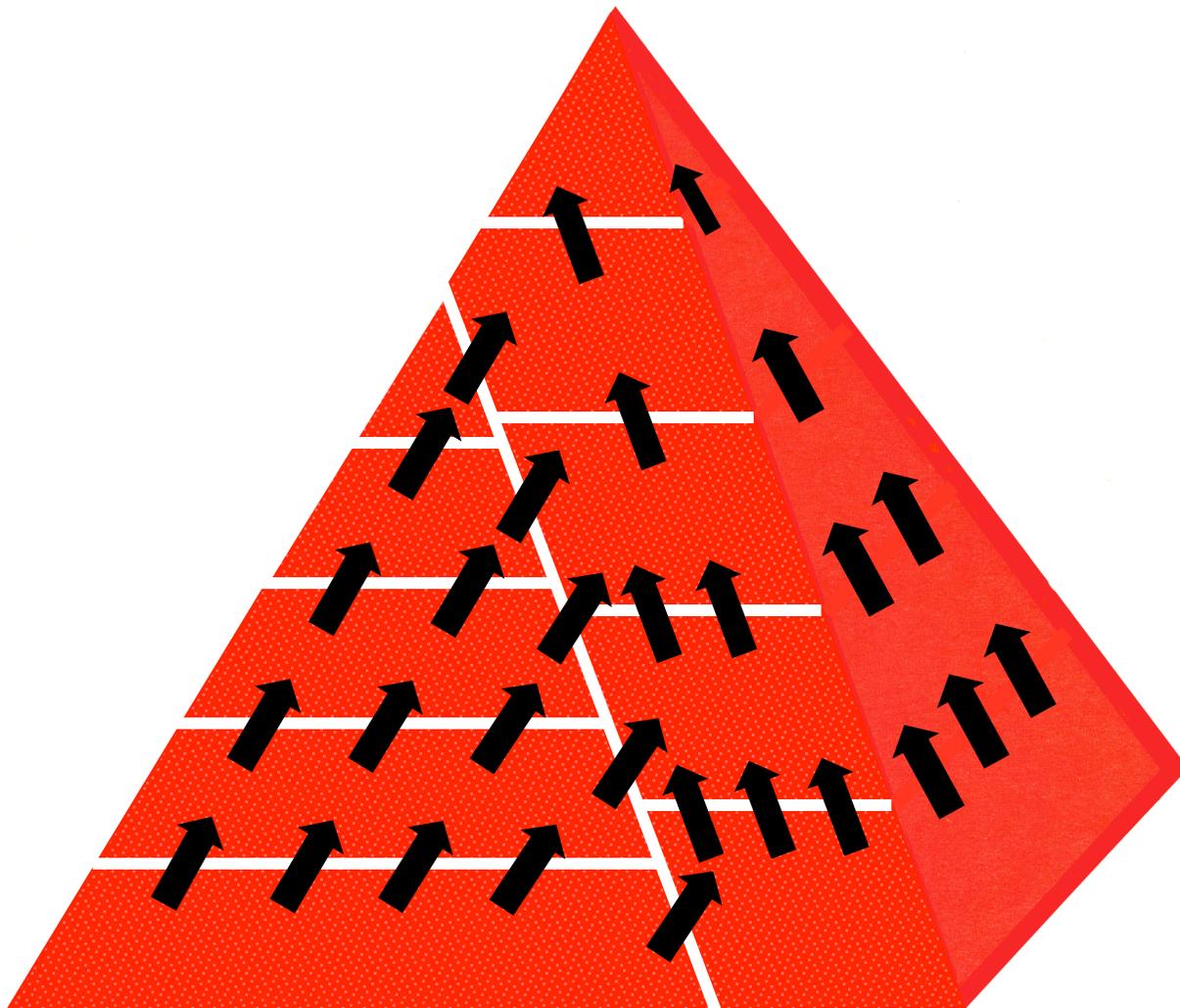
So . . .

EXPERIENCED EMPLOYEES

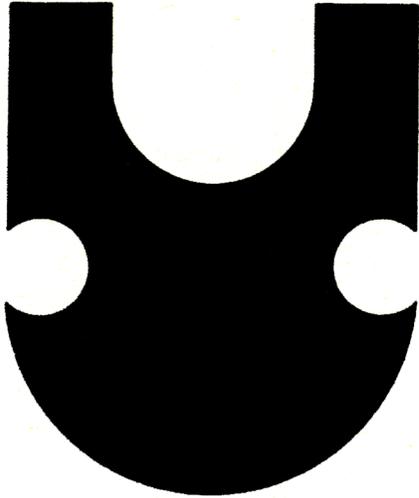
and quick learners

are “upgraded”

to higher skilled jobs



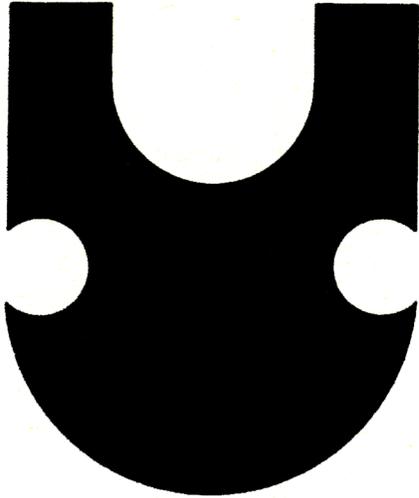
**Additional workers must be
brought in from the outside**



**Here is an example
from an
airplane parts
factory:**

**Formerly
this part was made
by a skilled worker . . .
an all-around craftsman . . .
who did the whole job
himself**

ALL-AROUND CRAFTSMAN



BUT...

additional

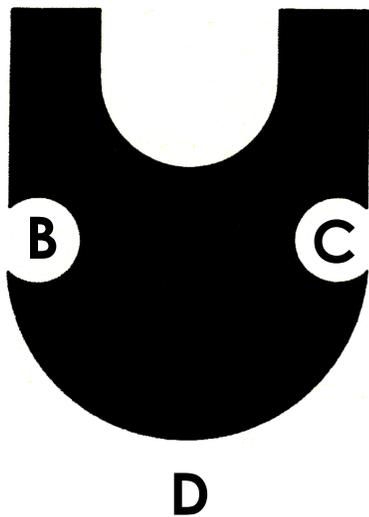
craftsmen

could not be had ...

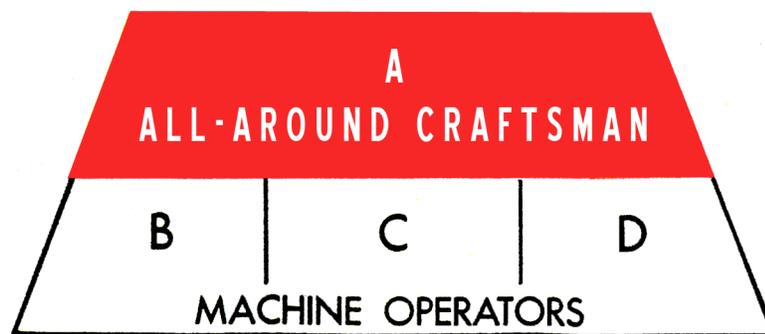
SO ...

the *job was analyzed ...*

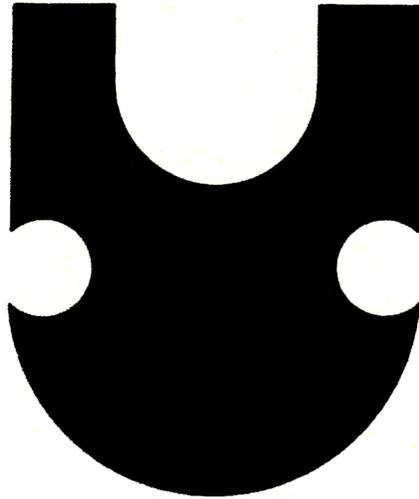
and it was found:



**ONE PART OF
THE JOB, **A**,
had to be done by
the **craftsman** ...**



**...and three of the steps,
B, C, and D, could be per-
formed by three machine
operators when each had
received training in one
of the operations**



**IN PRACTICE, IT
AMOUNTS TO THIS . . .**

**A job usually performed
entirely by a **craftsman****

A



becomes

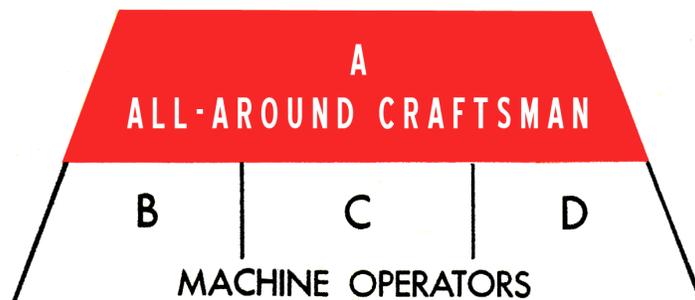
several operations . . .

one performed by the

craftsmen ... and the

others ... by several

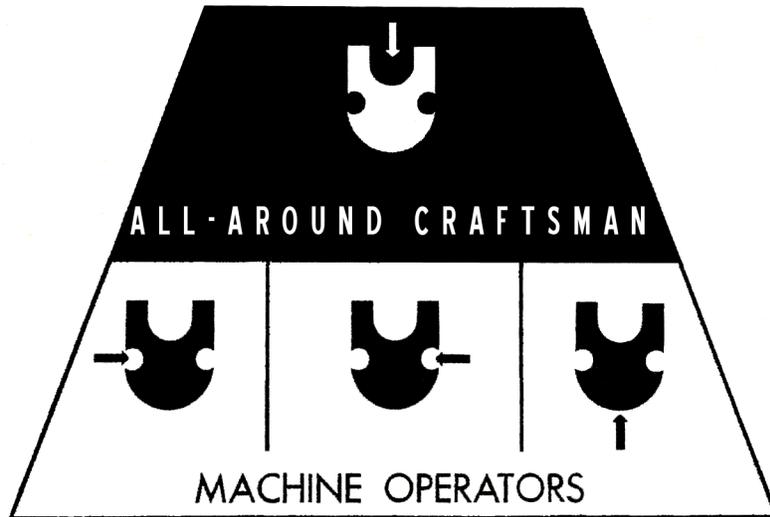
MACHINE OPERATORS



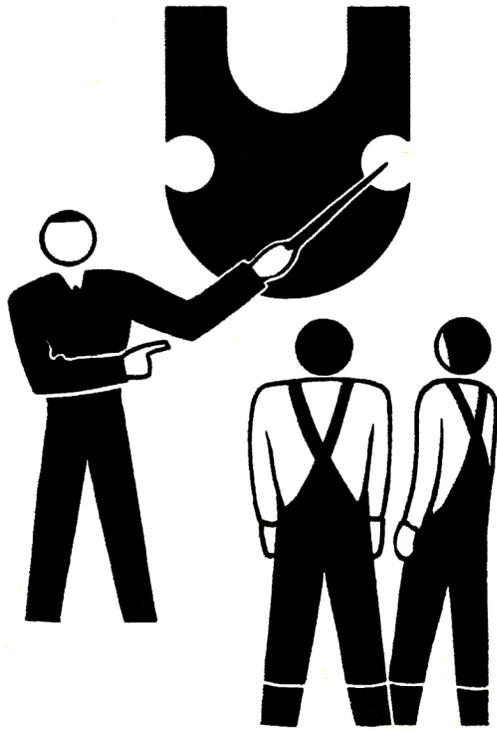


**THE ALL-AROUND
CRAFTSMAN, THEN,
does **three things:****

- 1. He uses
his best skill**
- 2. He helps
train new operators**
- 3. He helps
keep up the quality**



**And the MACHINE
OPERATORS start as
beginners . . . each of
whom quickly learns
to perform . . . a single
production operation**

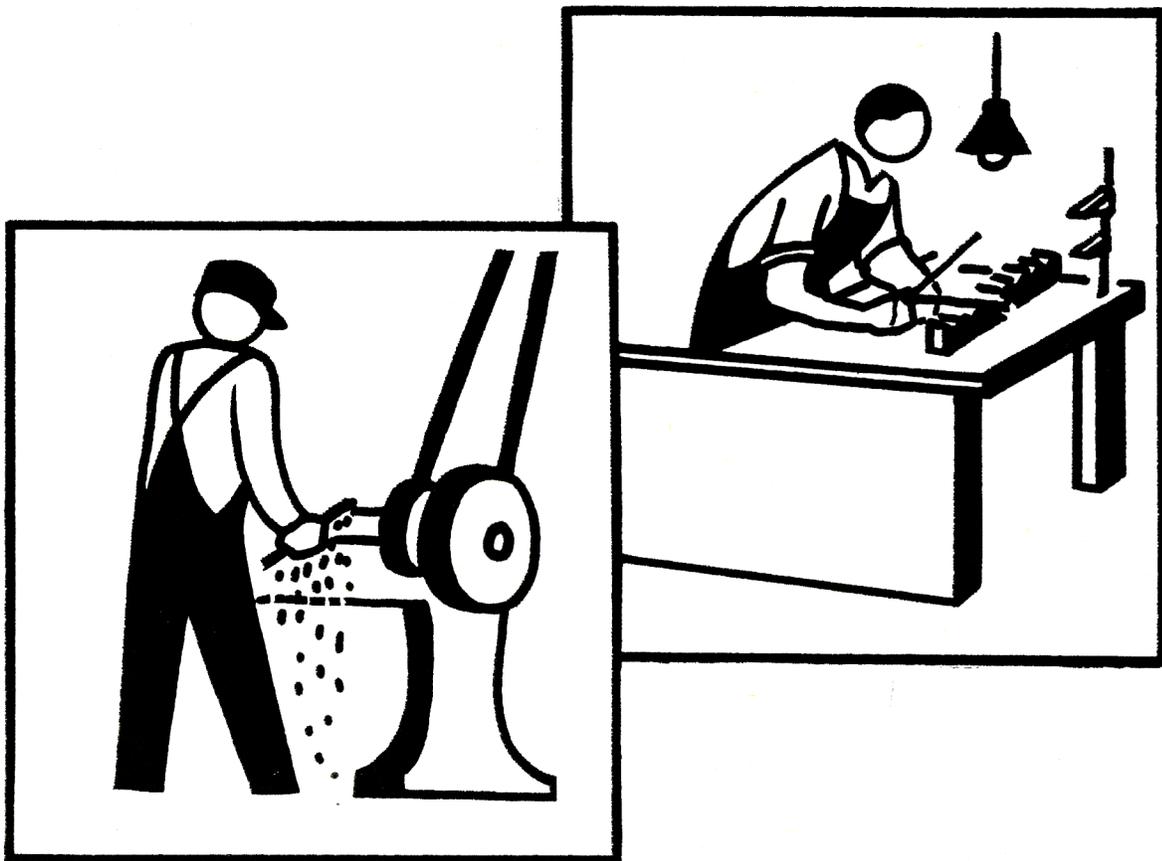


**In order to
become production
operators . . .
beginners must
learn by doing . . .**

THEY MUST BE TRAINED!

**for the specific
operation they
are to perform**

**As production operators
become more competent
(and there are openings for them)
they are advanced**



to more difficult operations.

Thus, they are upgraded.

**This also applies to
present employees.**

The WORKING FORCE

must be built up ...

at the same time

that equipment and

materials are being provided

**ADVANCEMENT
SHOULD NOT BE
HAPHAZARD ...**

There should be

a definite upgrading policy ...

**and it should be known
to all workers.**

**This builds efficiency
and morale**

**These methods
help supervisors!**

**Good supervision today
requires not only
... manufacturing experience**

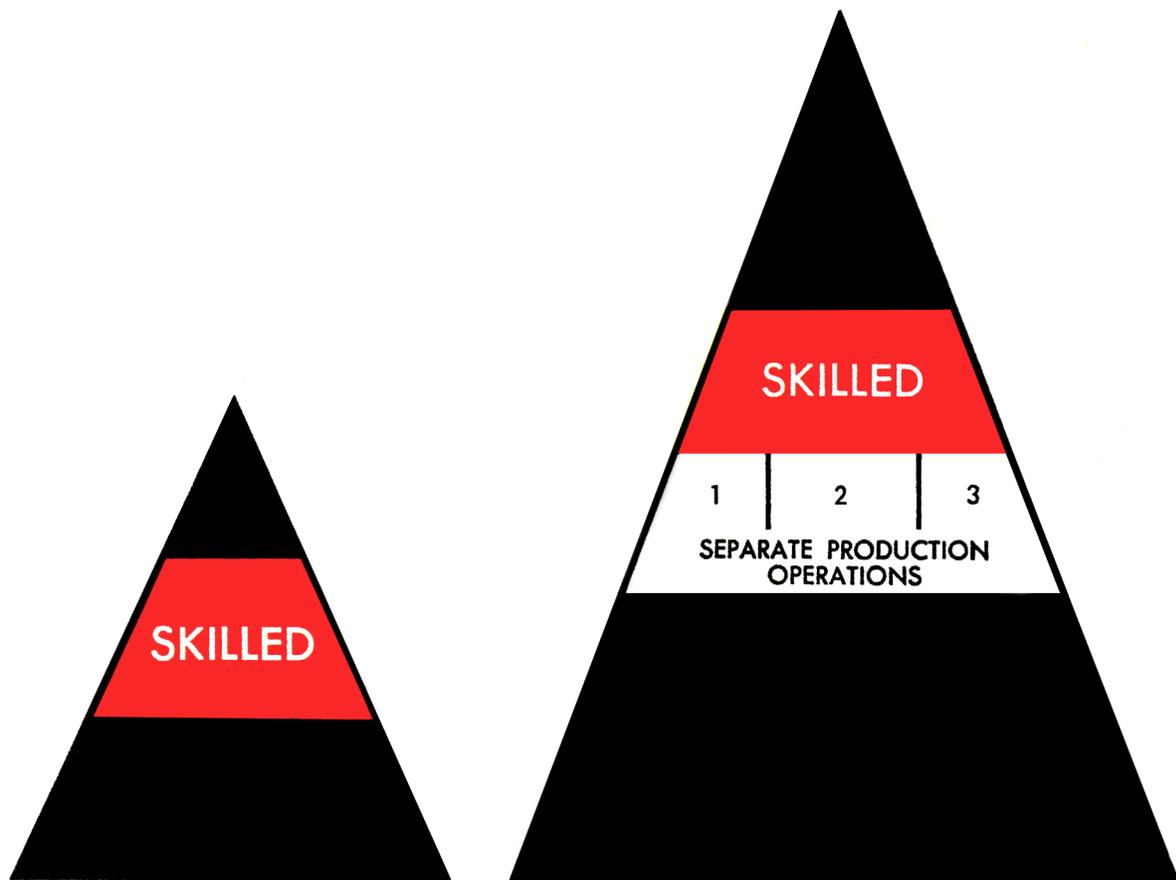
**but, it calls for
...an understanding of people
...knowledge of how to teach**

SO ...

**SUPERVISORS ALSO MUST
BE TRAINED!**

ONE OF THE MOST URGENT PROBLEMS

is a shortage of
skilled workers



BREAKING DOWN SKILLED JOBS into
separate production operations is one
solution

THIS ... THEN ...

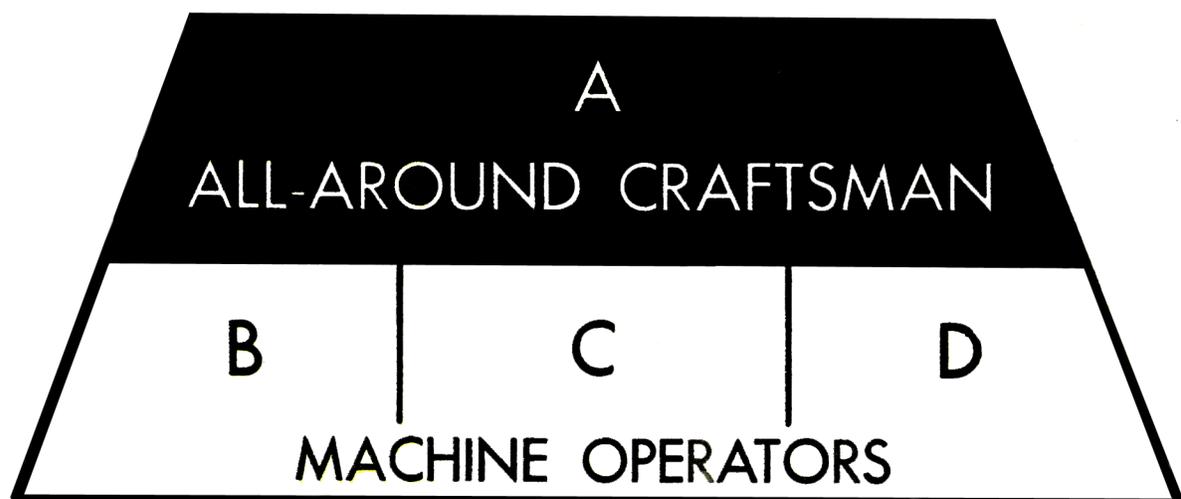
IS WHAT' S NEEDED

TO STEP UP

PRODUCTION IN

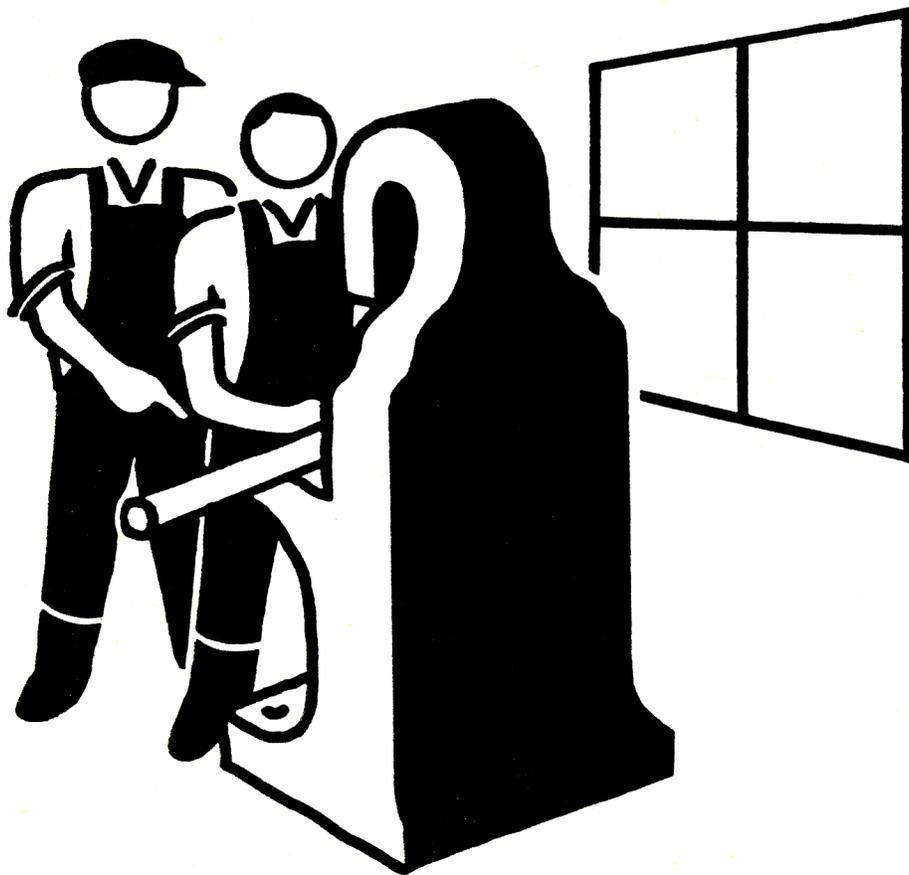
THE SHORTEST TIME:

1 • ANALYZE the skilled job
(for which no additional
craftsmen can be had)
and break it down
into production operations
that an ordinary
worker can do



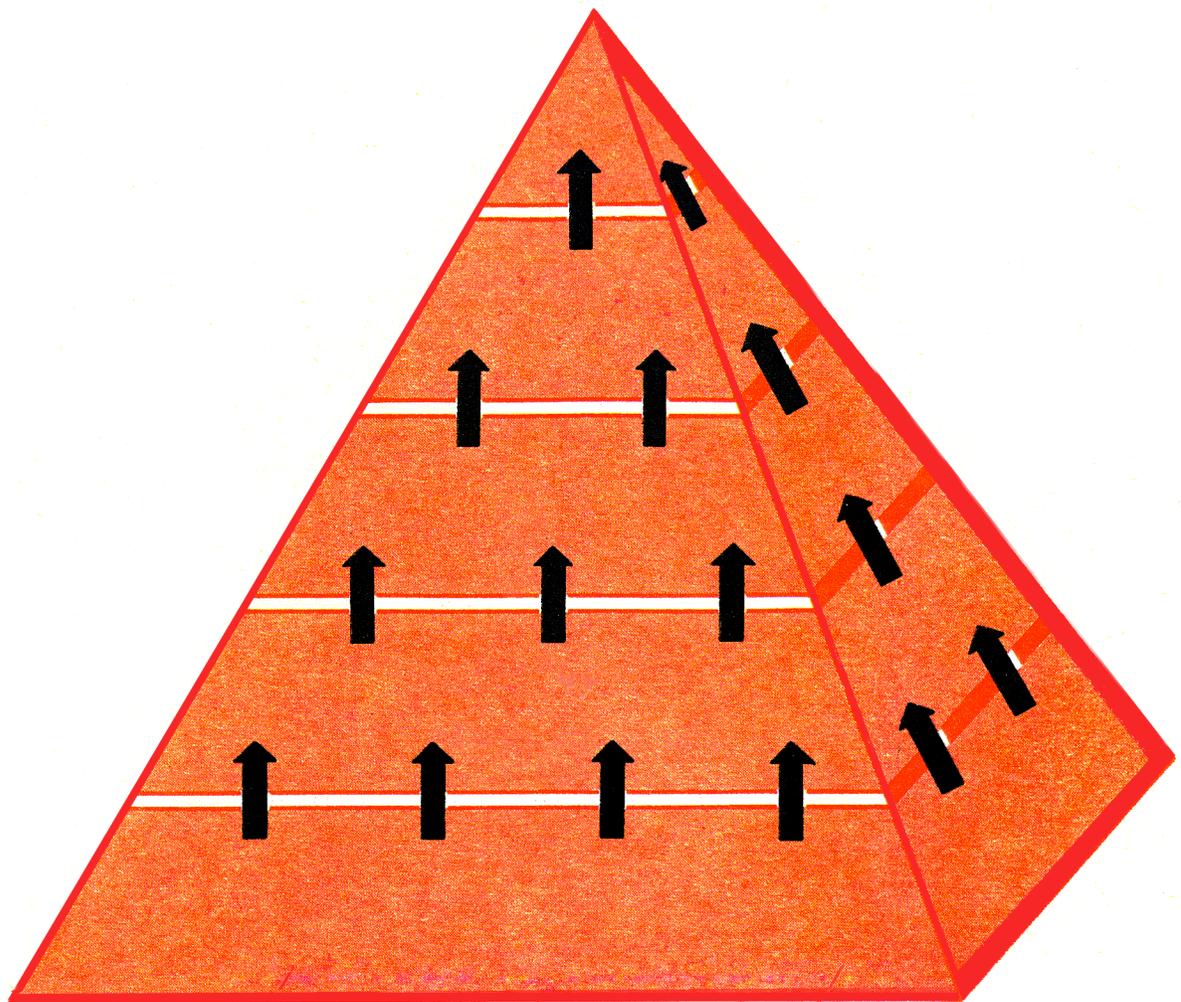
**2 • Train new employees
to become**

PRODUCTION OPERATORS . . .



3 • Develop a consistent

UPGRADING policy . . .



4 • **TRAIN YOUR SUPERVISORS..**

**potential, new, and present . . .
to be better leaders and
better teachers . . .**

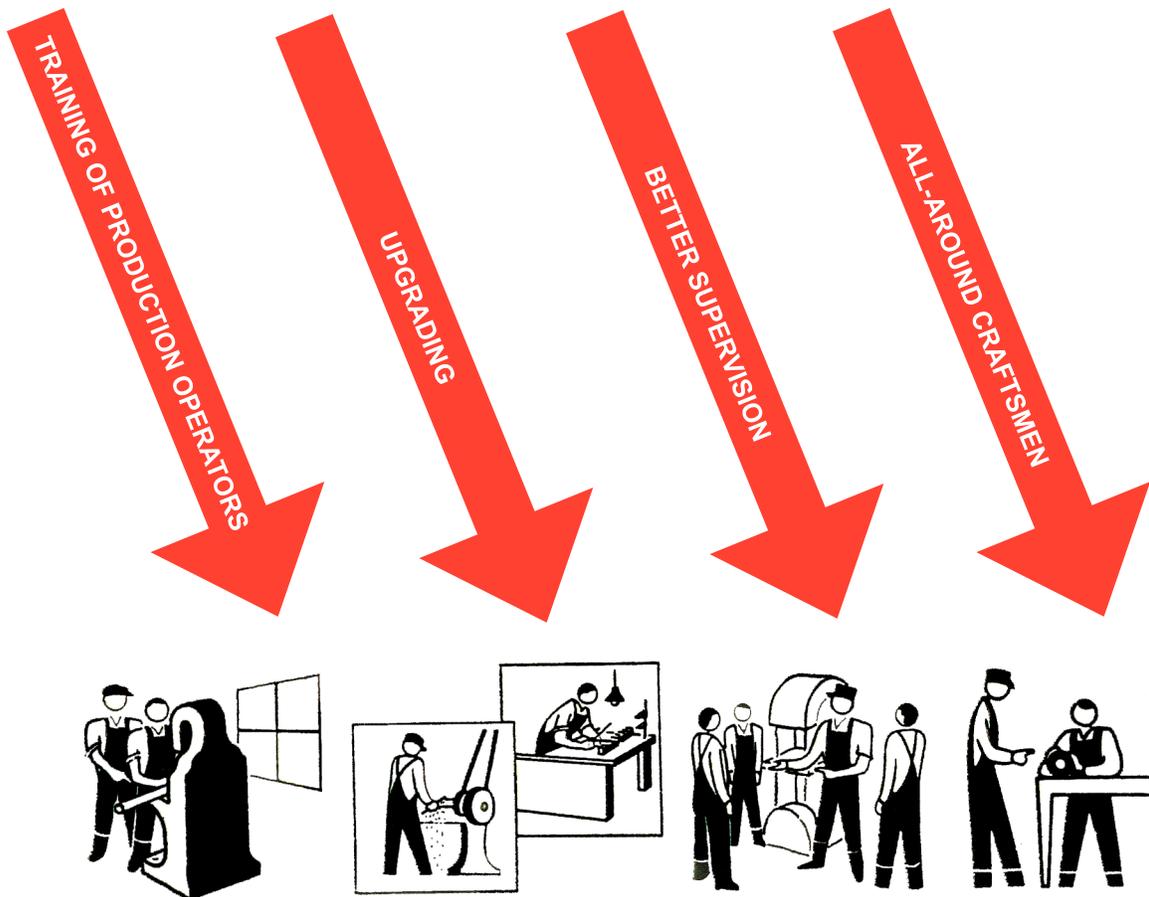


**5 • Train more all-around
craftsmen . . . through
APPRENTICESHIP**



SO . . . TO REPEAT . . .

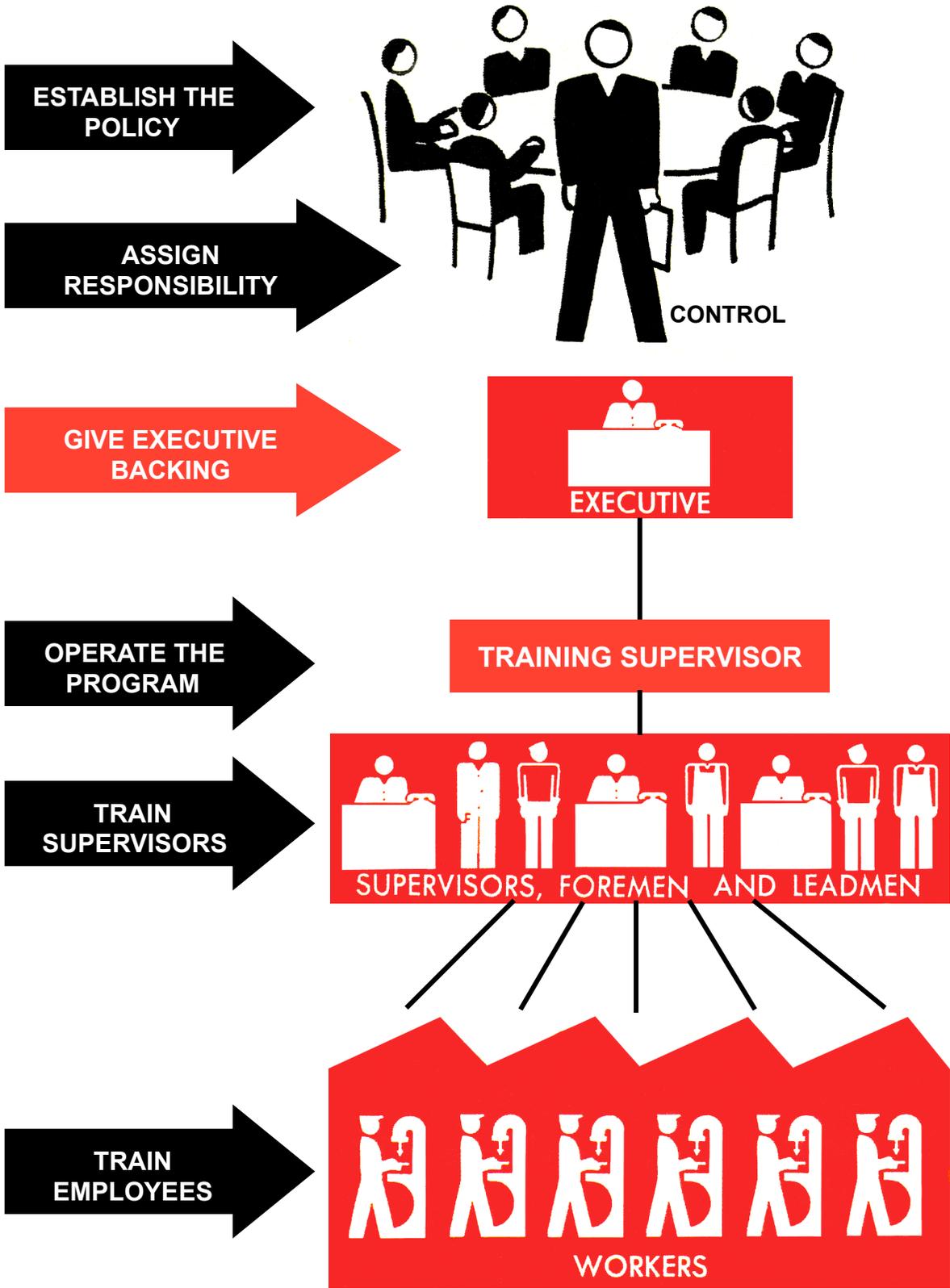
-after analyzing the job-
training in your plant . . .
should take these forms:



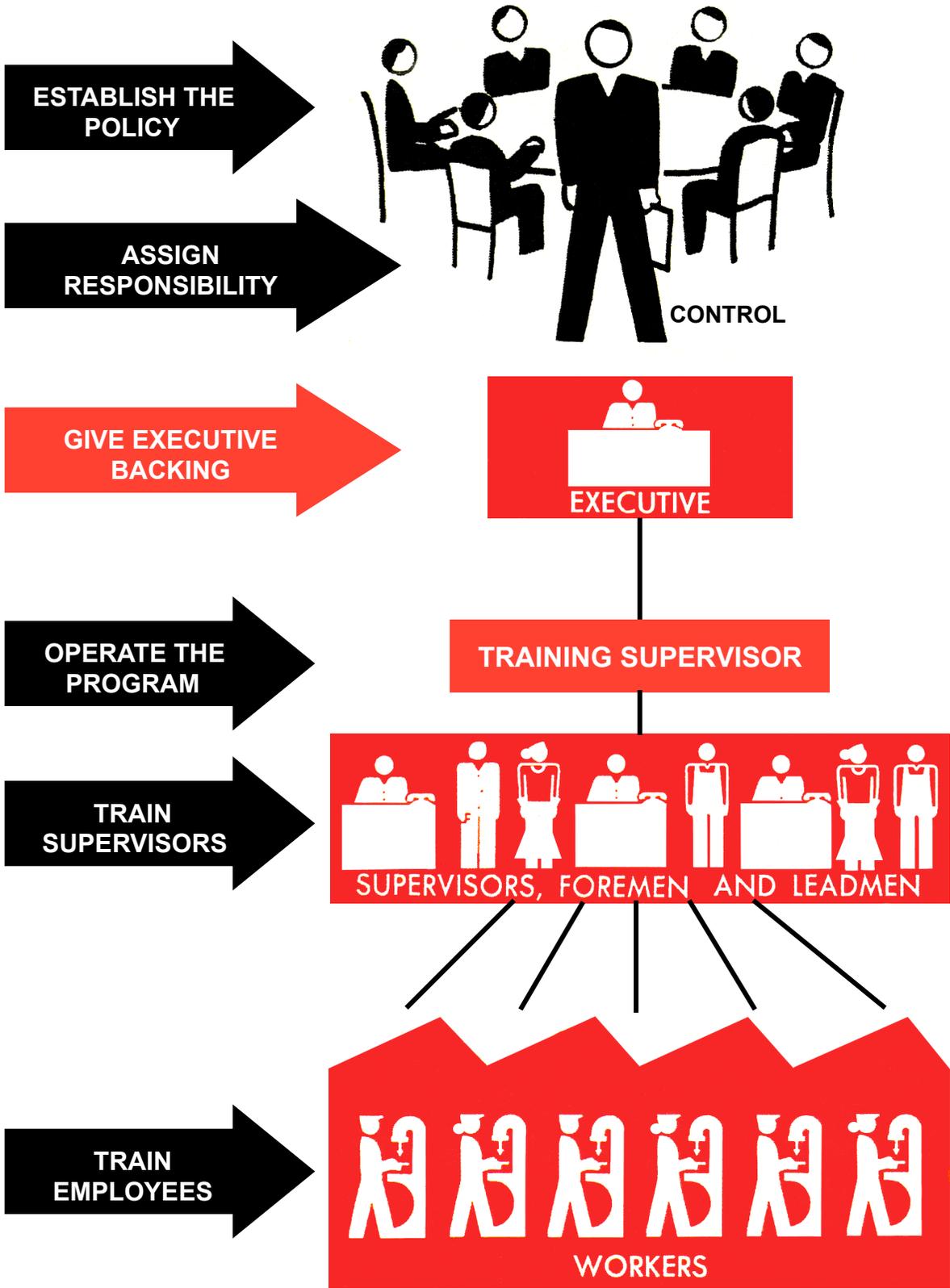
AND HERE IS A WAY

**TO PUT TRAINING
TO WORK IN YOUR
ORGANIZATION:**

FIX THE RESPONSIBILITY!

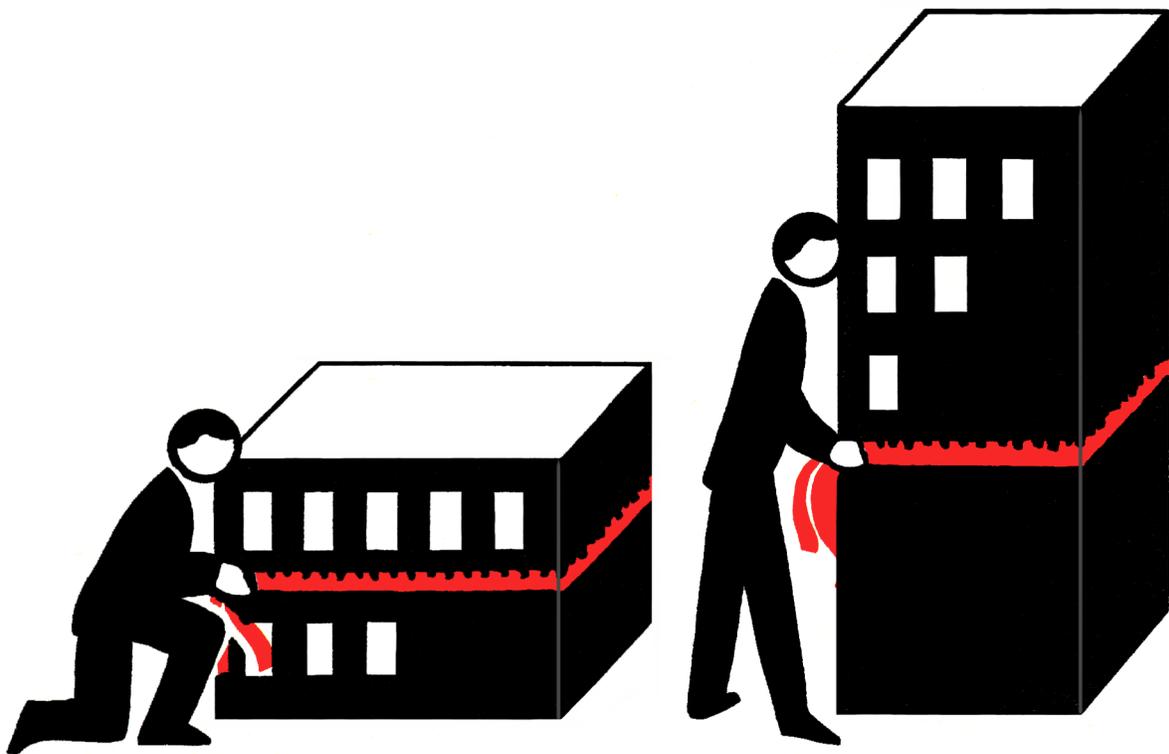


FIX THE RESPONSIBILITY!



MAKE IT FIT YOUR NEEDS . . .

**-Training must be
tailor-made . . .
to fit your plant . . . your jobs . . .**

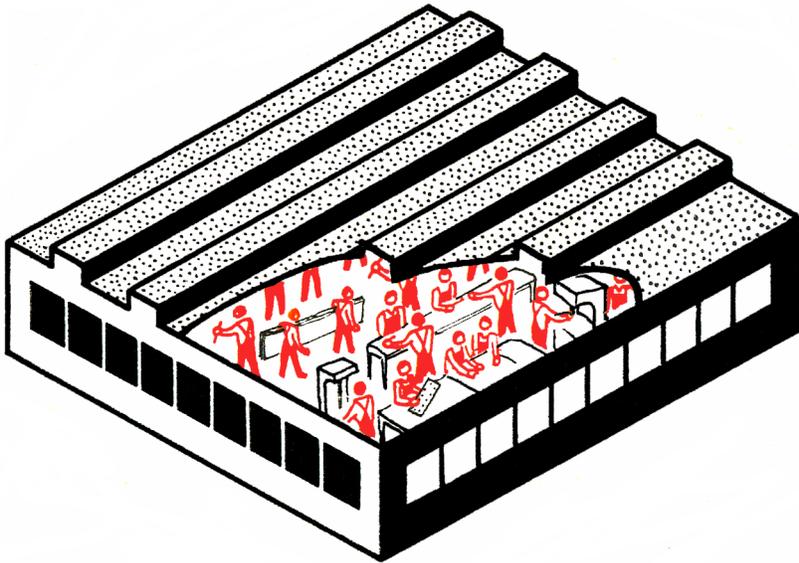


and . . . YOU MUST DO THE TRAINING

PLAN IT FOR BOTH . . .

NEW WORKERS . . . and

EXPERIENCED WORKERS



**Such a program
TURNS OUT A
QUALITY PRODUCT**

in less time at lower cost

