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AN OVERVIEW OF THE OSD/ONR CONFERENCE ON  
FIRST TERM ENLISTED ATTRITION

Robert F. Lockman

Professional Paper No. 184

June 1977

The ideas expressed in this paper are those of the author. The paper does not necessarily represent the views of either the Center for Naval Analyses or the Department of Defense.

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14 CNA PROFESSIONAL PAPER-184 ✓

6 AN OVERVIEW OF THE OSD/ONR CONFERENCE  
ON FIRST TERM ENLISTED ATTRITION,

10 Robert F. Lockman  
Center for Naval Analyses ✓

11 Jun 77  
12 25p.

21 Presented to the ~~NAV~~ MORS  
Working Group on Manpower and Personnel Planning (39th)  
Annapolis, MD.  
held on 28-30 June 1977 at ✓

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SLIDE 1

The OSD/ONR First Term Enlisted Attrition Conference was held in early April at the Xerox International Training Center in Leesburg, Virginia.

SLIDE 2

The conference presented the viewpoints on causes and solutions to premature attrition of (1) the research community in both the government and universities; (2) military service manpower managers; (3) ODDR&E, represented by COL Henry Taylor, and workshop chairmen; and (4) the Deputy Assistant Secretary of Defense for Planning and Requirements, Mr. Irv Greenberg.

The purpose of the conference was to describe and stimulate research needed to help manpower managers solve attrition problems.

SLIDE 3

I counted over 130 attendees: 60 of them were military, including 5 flag or general officers; 35 were civil service personnel from in-house DOD labs; 20 from the academic world; and about 10 civilians each from the Defense and military service departments and contractor community. The lowest participation rates -- whether as presenters, panelists, or moderators -- were from the military and the Defense or service departments, the target audience.

Notice that 30 percent of the participants were from the civilian labs and 30 percent from academia. With this in mind, let's look at the structure and sources of the 26 research papers that occupied the major share of the conference time.

SLIDE 4

The conference started off with a keynote address that was followed by background information on first term attrition in the DOD, setting the stage. Then the substantive sessions were devoted to factors in attrition: organizational, job, individual, and costs, plus a couple of field studies.

The academics dominated the sessions on organizational and job factors (perhaps a reflection of ONR's role in setting up the conference, plus the fact that most such research is carried on by universities). On the other hand, the civilians from in-house DOD labs (ARI, AFHRL, NPRDC) dominated the sessions on individual factors and field studies -- their major areas of expertise.

Let me briefly describe the topics presented before trying to summarize them in one comprehensive slide.

SLIDE 5

The keynote was entitled, "It's a new ball game: changing expectations of military service." The theme was that the military has passed from a service or calling of civilian soldiers to an occupation much like any large civilian employer. This, it was asserted, is the main reason for the attrition fix the military is in.

Next we turned to the background of attrition. We were told that male non-prior service losses have increased over the years, even after controlling for education and mental ability, whereas losses of women have stabilized. We were also told that the marginal cost of recruiting today ranges from 1K in the USAF to 1.5K for the Navy to 3K for the Army.

DOD and service policies about premature attrition were seen to be similar, but most centrally controlled in the USN and least so in the Army -- both of which require member consent for discharge.

The Army Trainee Discharge Program was described as a good policy for taking unavoidable losses (low aptitude, discipline, inability, unmotivated) early and thus cutting down on AWOL, desertions, CMS, etc.

Canadian loss experience with a voluntary opt-out program (58 percent loss in four years) was attributed to societal factors: high civilian turnover, longer educational periods (community colleges), hence a lower quality input with unrealistic expectations (sometimes encouraged by recruiter pitches). Twenty-five percent of the recruits had even been fired from civilian jobs before entering the service. Whether this thesis applies to the USA is debatable. The Canadians also have another problem: unleavers, or people who stay but don't do anything.

When we got into the organizational factors affecting attrition, we were told about the need for the absorption or more gradual transition of civilians into the military; that the QMA

today are less committed to institutions, such as the military, than their predecessors; that dropouts are by no means unique to the military; and that job dissatisfaction is the root of attrition. An ongoing longitudinal study of Marine Corps recruits, looking at individual and organizational factors in attrition, was presented, followed by the gleanings from extensive interviews with Navy and Marine Corps attriters -- who seemed in general to be ill-prepared for training and unable to adjust to the military way of life.

During the next session on job factors in attrition, we learned that job changing among civilians in the QMA age group was worse than the military's attrition experience. A representative of our Xerox host talked about their salesperson attrition problem and what they were doing to alleviate it -- realism, screening, and management development.

Then DOD came in for criticism for being ineffective in attrition management because of the "mentality of economic incentives" (they draw low quality recruits who attrite); the enduring but wrong-headed philosophy of up-or-out; the inadequacies of the Armed Services Vocational Aptitude Battery (ASVAB) for measuring reading comprehension that is important to surviving in the military; and the relatively small RDT&E budget for research on military people problems compared to funds expended for weapons systems.

Next, two presentations were given on a similar theme: behavioral rehearsal or teaching coping skills for adjusting to and getting along in the military. The point was, "If you don't know it, you can't use it," referring to how to talk with non-coms and officers, get along in the barracks, operate off the base -- particularly for inexperienced recruits in lower educational and mental categories. Finally, the Air Force told us about Maximum Likelihood loss prediction technique, which might better have been put in the session on individual factors where models for predicting losses were presented.

The session on cost factors and field studies contained only one cost factor paper that described a cost/loss/effectiveness model developed for the Navy and gave some calculations for three kinds of recruit inputs. Two Navy field studies were presented. One described the experimental voluntary-out program for men who do not get technical training: a first year loss rate of 46 percent compared to 32 percent for a control group. Then we saw the loss rates for three years' worth of entering Navy cohorts by rating (MOS), and some startling loss differences across ships in the same divisions. Work environment and organizational climate differences were involved here.

The last session on individual factors in attrition covered a description of some work on career expectations in the Navy; identification of high attrition risks with measures of adjustment in the Air Force; the advantages of non-linear over linear

prediction models for recruit screening; prediction of recruit motivation and adjustment from age, education, civil convictions, and a "leg-up" test; prediction of losses and desertions in the Marine Corps using available pre-service characteristics and test scores; and, finally, some thoughts on Army retention that is facilitated by a congenial environment, poorer civilian opportunities, and opportunity for upward mobility.

SLIDE 6

Now let's see if I can distill the wisdom of the 26 papers into one slide. Without, I hope, doing too much violence to the views of the participants, I've broken the attrition "causes" and "solutions" into three categories each and indicated specific suggested remedies by cause and solution categories. The three major causes are societal, individual, and organizational. The three main solutions are selection, intervention, and organizational change.

1. Societal causes refer to the way our culture operates today, particularly the occupationalism that has affected the military: it's a job (and maybe also an adventure), but a job nonetheless, no longer a calling for citizen soldiers. We can select to try and get around this problem by substituting women, older people, civilians -- an often-heard proposal. Intervention is no help here, but organizational change using a trial period without full military benefits might be useful.



2. Individual causes of attrition revolve about unrealistic and incorrect expectations about what it's like in the military (some conveyed by recruiters and others due to overly demanding recruits). Selection in the form of screening for motivation and adjustment to the service and for the literacy that is necessary to get along in it can help here. Where screening cannot do the job, intervention in the form of orientation about what's going to happen, teaching how to cope with new situations that arise in the service, providing models or demonstrations of appropriate behavior, and rehabilitation of marginal performers was suggested. It was asserted that about half of mental group IVs could perform certain jobs quite satisfactorily, but the problem was identifying which half without suffering the loss of the other half. Where the organization comes in, recruits' skills might be better matched with the jobs they are assigned to, and achievement might better be reward because those with feelings of achievement tend to stay.

When we come to organizational causes of attrition, defective management policies and unit practices take the blame: outmoded, uneconomical, monolithic policies often buttressed by law and tradition; and variable, situational influences in men's units -- as one Marine Major put it, "How come good guys in one unit turn into bad guys in another one?" Selection isn't much help here, but intervention in the form of differential training schedules and assignment practices -- sort of tailor-made to the recruits' aptitudes, abilities, and motives -- could help get around the

problem. Organizational change would be a more direct solution: revision of the up-or-out policy and more appropriate incentives, for example. Then the gatekeepers of the military -- the recruiters, drill sergeants, company commanders, and the like -- need some training in intervention that tends to run counter to their selection bias. Since these are the people who have the most immediate and frequent influence on the recruit, they are in the position to affect his behavior for good or for ill. Most recruits rarely see a general or admiral, but all of them see a non-com who has an awful lot of power over them.

SLIDE 7

Next, the manpower chiefs of the four services and the DASD for Military Personnel Policy gave us their views on combating attrition, particularly with regard to selection or screening solutions.

SLIDE 8

Six workshops with members cutting across the spectrum of conference attendees convened after the daily sessions to discuss and elaborate on what had transpired. The summarization of these deliberations was presented by the appointed workshop leaders in a closing session chaired by COL Henry Taylor of ODDR&E. Here is the way I viewed their presentations, using the selection-intervention-organizational change framework.

Selection: Stress was put on providing realistic job information to recruits and upon non-cognitive screening, that is, for adjustment and motivation. Peer ratings were pointed out as proven predictors and criteria of success that are superior to supervisors' ratings but nonetheless generally ignored by the military. Alternative supplies of manpower, again, were suggested. And we were warned to watch out for self-fulfilling prophecies in selection programs: what you expect is what you get.

Intervention: The teaching of coping skills, like the teaching of job knowledges and skills, ought to be undertaken. Alternative training and training time schedules more adapted to the recruit's needs were recommended along with recycling and rehabilitation of marginal performers. But we were warned that intervention can be costly and produce unwanted side effects, so it should be balanced with the cheaper but limited screening approach.

Organizational Change: It can be done, was the assertion here. Clarification of the military's peacetime role was envisioned as an important goal to justify service. The better matching of people with jobs, including different levels of job difficulty, was mentioned. At the same time, possible limits to job enrichment from the worker's own standpoint were described with reference to U.S. and Volvo automobile production experience. Exploration of the wide differences in attrition in different military units was recommended, as was research on how to get more mutual commitment of organizations and individuals. Finally,

there were several pitches for more field studies or demonstrations that use available selection technologies. They're cheap and could be run at AFEES, recruiting districts, and boot camps. COL Taylor especially stressed this course of action.

SLIDE 9

The conference concluded with the DASD(M&RA) view of attrition, that of Mr. Irv Greenberg. He pointed out that current attrition rates continued into the 1980s when the manpower pool of QMA males shrinks would be very expensive. He suggested management actions to avert such a situation:

1. Increase supply, including the use of more women and reduced standards. Here he presented numbers purporting to show that AFV educational and mental group levels have not declined from the days of the draft, concluding that quality was not driving attrition.

2. Reduce requirements by reducing attrition and changing the manpower mix, but watching out for mobilization needs. With regard to bonuses, he said that upping standards for bonus qualification would avoid paying the 90 percent who volunteer to get 10 percent to fill requirements.

Supply changes will be gradual, he pointed out, so we have time. However, institutions must change to accommodate to these changes, and he thinks they will when they see that it is necessary. Will they see in time?

Finally, we were exhorted to use cost data and use it carefully, since most high-level arguments in DOD are about costs and their calculations.

In closing, allow me two comments: Cost studies were sparse. There was only the one Navy model I mentioned. If costs are as important as the DASD(M&RA) and others claim, then we've got a long way to go. Second, many of the selection, intervention, and organizational change recommendations will have to be implemented by the gatekeepers of the military: those supervisory people, usually senior non-commissioned officers, with whom recruits must deal the most. The incentives these gatekeepers will have to behave beyond their usual selection or screening function need to be identified. If intervention and organizational change are needed, somebody above them is going to have to intervene to change the organization.

SLIDE 1

OSD/ONR CONFERENCE  
ON  
FIRST TERM ENLISTED ATTRITION  
4-7 APRIL 1977

SLIDE 2

VIEWS

RESEARCHERS

MILITARY MANPOWER MANAGERS

DDR&E

DASD (M&RA)

## ATTENDEES AND ACTORS

	<u>ATTENDEES</u>	<u>PARTICIPANTS</u>	<u>PARTICIPATION RATE</u>	<u>PERCENT OF PARTICIPANTS</u>
MILITARY	60	10	17%	20
CIV. LABS	35	15	43%	30
ACADEMIC	20	15	75%	30
DOD	11	2	18%	4
CONTRACTORS	<u>10</u>	<u>8</u>	80%	<u>16</u>
TOTAL	136	50	37%	100



## RESEARCH PAPERS

	ACAD.	CIV. LABS.	MIL.	PCRC	CONT'R	DOD	INDUS.	TOTAL
KEYNOTE	1							1
1st TERM ATTRITION IN DOD			2	1		1		4
ORGANIZATIONAL FACTORS	5				1			6
JOB FACTORS	3	1	1				1	6
INDIVIDUAL FACTORS		4		2				6
COST FACTORS					1			1
FIELD STUDIES		2						2
TOTAL	9	7	3	3	2	1	1	26

## TOPICS

### KEYNOTE

CHANGING EXPECTATIONS OF MIL. SERVICE

### 1ST TERM ATTRITION IN DOD

TRENDS

POLICIES

ARMY EXPERIENCE

CANADIAN EXPERIENCE

### ORGANIZATIONAL FACTORS

ABSORPTION INTO MILITARY

COMMITMENT TO ORGANIZATIONS

POST-H.S. DROPOUTS

JOB DISSATISFACTION

USMC LONGITUDINAL STUDY

NAVY/USMC INTERVIEW RESULTS

### JOB FACTORS

CIVILIAN JOB CHANGING

XEROX SALESPERSON PROGRAM

DOD POLICY DEFICIENCIES

BEHAVIORAL REHEARSAL

COPING SKILLS

USAF PREDICTION TECHNIQUE

### COST FACTORS & FIELD STUDIES

NAVY VOL-OUT PROGRAM

NAVY COHORT LOSS TRACKING

COST/LOSS/EFFECTIVENESS MODEL

### INDIVIDUAL FACTORS

NAVY CAREER EXPECTATIONS

USAF IDENTIFICATION OF HIGH RISKS

LINEAR VS. NON-LINEAR PREDICTION MODELS

ARMY MOTIVATION AND ADJUSTMENT PREDICTION

USMC LOSS/DESERTION PREDICTION

ARMY RETENTION FACTORS

## PERSPECTIVES

<u>"SOLUTIONS"</u>		
<u>ATTRITION "CAUSES"</u>	<u>SELECTION</u>	<u>INTERVENTION</u>
<u>SOCIETAL</u>	<u>SUBSTITUTIONS</u>	<u>ORGANIZATIONAL CHANGE</u>
<u>OCCUPATIONALISM</u>	<ul style="list-style-type: none"> <li>o WOMEN</li> <li>o &lt; BA</li> <li>o OLDER</li> <li>o CIVILIANS</li> <li>o CONTRACTORS</li> </ul>	TRIAL PERIOD WITHOUT FULL BENEFITS
<u>INDIVIDUAL</u>	-----	
<u>EXPECTATIONS</u>	<u>SCREEN FOR:</u>	<u>ORIENTATION</u>
<u>LOW COMMITMENT</u>	o MOTIVATION & ADJUSTMENT	MATCH SKILLS WITH JOBS
<u>JOB DISSATISFACTION</u>	o LITERACY	REWARD ACHIEVEMENT WITH RECOGNITION
<u>ORGANIZATIONAL</u>		
<u>DEFECTIVE POLICIES</u>	-----	REVISE UP-OR-OUT
<u>UNIT PRACTICES</u>		REVISE INCENTIVES
		TRAIN GATEKEEPERS IN INTERVENTION

MILITARY MANPOWER MANAGERS' VIEWS

- USMC -- STRESS SERVICE, NOT OCCUPATION, AND QUALITY, NOT QUANTITY
- USA -- TRAINEE DISCHARGE PROGRAM
- USN -- SCREEN AND SEPARATE HIGH RISKS EARLY
- USAF -- RELEASE EXCESS SKILLS EARLY
- DASD (MILITARY PERSONNEL POLICY)
  - o OSD IS CATALYST
  - o BIGGEST MANAGEMENT PROBLEM: HIGH AVF ATTRITION
  - o 7,400 LEGISLATIVE CONSTRAINTS ON COMPENSATION AND PERS. MANAGEMENT
  - o REMEMBER THE TOTAL FORCE

DDR&E VIEW

SELECTION

REALISTIC JOB INFORMATION

NON-COGNITIVE SCREENING

PEER RATINGS AS PREDICTORS  
AND CRITERIA

ALTERNATIVE SUPPLIES

- o WOMEN
- o OLDER
- o LESS PHYSICALLY ABLE
- o JR. COLLEGE GRADS

WATCH SELF-FULFILLING  
PROPHECIES

INTERVENTION

TEACH COPING SKILLS

ALTERNATIVE TRAINING & TRAINING TIME

RECYCLE & REHAB.

COSTLY, WATCH SIDE EFFECTS

BALANCE WITH CHEAPER BUT  
LIMITED SCREENING

ORGANIZATIONAL CHANGE

CAN BE DONE

CLARIFY PEACETIME ROLE

MATCH PEOPLE WITH JOBS  
AND THEIR DIFFICULTY

LIMITS TO JOB ENRICHMENT

EXPLORE BIG UNIT  
DIFFERENCES IN  
ATTRITION

HOW GET MORE ORG'L AND  
INDIVIDUAL COMMITMENT?

\*MORE FIELD DEMONSTRATIONS  
---THEY'RE CHEAP

DASD (M&RA) VIEW

MANAGEMENT ACTIONS

- INCREASE SUPPLY
- REDUCE REQUIREMENTS

SUPPLY CHANGES GRADUAL

INSTITUTIONS MUST CHANGE

COST DATA MUST BE USED - CAREFULLY

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