ANNUAL RESEARCH REPORT
1985/86

BY
LIEUTENANT COLONEL P.N. DRAKE-BROCKMAN

1st PSYCHOLOGICAL RESEARCH UNIT
ANNUAL RESEARCH REPORT

1985/86

by

Lieutenant Colonel P.N. Drake-Brockman

This Directorate of Psychology publication has been prepared by 1st Psychological Research Unit and is authorized for issue by DPSYCH-A.

LTCOL P.N. DRAKE-BROCKMAN
Commanding Officer
1st Psychological Research Unit
NBH 3 - 44
Northbourne House
TURNER ACT 2601

ISSN 1056-8825
## SUMMARY OF ACTIVITIES 1985

<table>
<thead>
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<th>Activity</th>
<th>Count</th>
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<tr>
<td>a. Research Projects and Service Papers</td>
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<td>(1) Research Notes</td>
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<td>(2) Research Reports</td>
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<td>(3) Technical Notes</td>
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<td>b. Lectures Presented</td>
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<td>c. Seminars and Conferences attended</td>
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<td>d. Papers presented</td>
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<td>e. Visits</td>
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<td>f. Technical Support</td>
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<td>g. Courses Attended</td>
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<td>h. Computer Tasks</td>
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<td>i. Library Assistance</td>
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## ONGOING AND PROPOSED ACTIVITIES 1986

<table>
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<tr>
<td>a. Research Projects</td>
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<td>d. Visits</td>
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## DISTRIBUTION LIST

<table>
<thead>
<tr>
<th>List</th>
<th>Page</th>
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<tr>
<td>I.</td>
<td>121</td>
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INTRODUCTION
This report is arranged into two main sections, the first of which is a summary of the activities undertaken and completed during the previous calendar year and the second section relates to the ongoing and proposed activities for the current calendar year. These divisions have been necessary since the activities planned for a calendar year are always supplemented by extraneous ad hoc activities of high priority. Indeed much of the Unit workload is of this extraneous ad hoc form and the demands it places on Unit manpower are considerable. These projects are an important part of the Unit's annual workload. The Unit wishes to retain the flexibility to respond to requests to conduct high priority research and therefore accepts the unpredictability of such projects. Because these projects are unpredicted and because they constitute a major part of this Unit's workload, they are included along with the predicted workloads, into a summary of Unit activities. This summary presents a true representation of the work undertaken in the Unit in the previous calendar year.

The second major section of this report relates to activities which are planned for the current calendar year. This programme includes ongoing and proposed research projects, planned attendance at seminars and conferences, lectures to be delivered, papers to be presented, proposed visits, proposed technical support and courses to be attended.

This document is prepared as a record of Unit completed and proposed activity and is distributed primarily to inform interested agencies, thereby publicizing research and obviating duplication of effort. The distribution of this report is covered elsewhere in these notes.

Command and Control. The 1st Psychological Research Unit is a Unit of the 2nd Military District (2MD) and is a composite Regular Army/Army Reserve Unit. It operates under the functional command of HQ 2MD, the technical control of the Directorate of Psychology - Army (DPSYCH-A), administrative support is provided by Local Administration, Canberra, and it has affiliations with Personnel Branch, Army Office.

Tasking. Unit tasking emanates from two reference channels. The first source is internal to the Australian Army Psychology Corps and relates to research which is generated as an integral part of the role of this Unit and which essentially relates to maintenance of standards and a quality assurance function. The research is implemented either from within this Unit or at the direction of DPSYCH-A.

The second source is external to the Psychology Corps but emanates from within the Army. Usually this research is channelled through Personnel Branch to DPSYCH-A who forwards the task to 1 Psych Research Unit. In rare instances, research projects may emanate outside the Army, for example, from other Government departments, and be channelled through to this Unit.

This Unit does not accept requests for psychological research from non-government sources, nor does it fund or contract the performance of research to civilian agencies or individuals.

Role. The role of the 1st Psychological Research Unit is to conduct personnel research and maintain psychological records, specifically:
a. To carry out routine and confidential follow-up studies into the efficiency of current psychological techniques and selection procedures.

b. Responding to requests from Department of Defence (Army Office) and other government departments for specific research projects.

c. The initiation of research projects which have a direct bearing on the efficiency of the Army.

d. Development of new psychological tests.

e. To assist in operational research tasks as required.

A description of which of the Unit's sub-roles is being invoked is provided by the category of research section in the summary of ongoing and completed reports which follow.

**Organization**

```
HQ

DATA ANALYSIS SECTION
  SGT

TEST CONSTRUCTION SECTION
  MAJ

LIBRARY
  SGT

RESEARCH SECTION
  MAJ

MAJ

CAPT
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**Staff.** The Unit is manned by 11 ARA personnel consisting of five officers and six supporting staff. The ARA element is supplemented by part-time ARES personnel as shown. Staff turnover is indicated by multiple entries against Unit establishment positions.

**CO** : LTCOL P.N. Drake-Brockman, B.A.(UWA), M.A.Ps.S.
**Senior Psych** : MAJ R.S. Collyer, B.A.(Qld), Dip Ed Psych (Mon), M.A.Ps.S., M.I.A.A.P.
**Psych** : CAPT N.J. Reynolds, B.A.(Hons), M.A.Ps.S., M.E.S.A.N.Z.
**Psych (ARES)** : Vacant
**USM** : WO1 T.A. Thurbon/WO2 T.S. Andrews
**Library SGT** : SGT I. McTaggart, B.A. (Lib Studies)/SGT R.A. Dawson.
**Data Analysis SGT** : SGT R. Hampton/CPL N. Hewitt, B.A. (ANU)
**Orderly Room CPL** : CPL C. McBain
**PTE** : PTE M. Berlin/PTE S. Bonfield
**PTE** : PTE P. Walker
**PTE (ARES)** : PTE Williams.
Research Priorities. Psych Research Unit priorities are determined by the following classifications:

Priority 1 Projects which are essential to the performance of the Unit role and which provide maximum benefit to the efficiency of the Army.

Priority 2 Projects which are an integral part of the Unit role and which are important to the efficiency of the Army.

Priority 3 Projects which are related to the Unit role and which when completed will be of benefit to the Army.

Annual Research Programme. The annual research programme of this Unit consists of three elements. They are:

a. Ongoing Projects: projects with which the Unit has been tasked and which will be continued in this calendar year.

b. Planned Projects: Those projects which fall into the maintenance of standards (usually selection criteria and norms) and quality control which are relatively routine and which the Unit is aware it must incorporate into the research programme for the current year.

c. Unplanned Projects: this grouping consists of those projects for which the Unit has no prior knowledge but which because of their high priority are meshed in with other Unit research projects. Unplanned projects which are uncompleted at the time of the preparation of this report become 'ongoing projects'. Completed unplanned projects are included in the summary of the previous year's activity.

Form of Reports. As a result of this Unit's work, reports are prepared in one of the following forms:

a. Research Notes: empirically-based, usually undertaken in response to a specific request, and substantially interpretative of the data collected. As a request commonly requires an answer as soon as possible, notes tend to lack the theoretical background and sophisticated discussion expected of an article in a learned journal. Some examples of recent research notes are: the Role of the Australian Army Psychologist in the Selection and Allocation of Soldiers (RN 1/85) and Renorm of Test RO3X (RN 2/85).

b. Research Reports: self-contained empirically-based, presented in the context of current theory and practice and meeting the standards for publication in a learned journal. Some examples of recent research reports are: A Preliminary Investigation into Stress in Australian Antarctic Expeditioners (RR 1/85).

c. Technical Notes: short, theoretically-based, supplying specific information obtainable by bibliographic research. These notes provide the background for implementing technical procedures. In essence they are "how to" instructions. Some recent examples: A Guide for Researchers (TN 3/83), Human
Behaviour in Emergencies (TN 5/85), An Introduction to
Computerized Adaptive Testing (TN 6/83) and A Plan for the
Treatment of Crisis Induced Stress Reaction for the Australian
Army (TN 2/84).

d. Technical Reports: self-contained, theoretically-based,
concerned with specific issues and taking the form of a position
paper or a general overview of either research or theoretical
issues. These reports usually deal with new technical
methodology or theory, for example; Calculating the Final Rank
Order for Items when Judges do not Rank all Items (TR 2/76).

e. Service Papers: these reports are unpublished and are prepared
in response to specific requests for information or as a
statement of the position of the Unit on various matters. With
prioritity considerations and time permitting service papers may be
converted into one of the earlier categories in this paragraph
and distributed more widely.

Lectures: From time to time this Unit is invited to deliver
lectures on matters relating to psychology and its application. The nature
of these lectures and to whom they were presented are indicated in the
relevant sections of this report.

Seminars and Conferences. Attendance at seminars and
conferences is an integral part of this Unit's activities in terms of
disseminating and acquiring information. These activities act as a
condensed interchange of professional information and are extremely
efficient in performing this function. It is Unit policy to attend all
relevant conferences without duplicating the information acquired. In some
instances where there is more than one theme of presentations at a
conference it is desirable to send more than one delegate so that all
relevant themes can be reported upon.

Papers Presented. Where Unit representatives attend
conferences it is usual for papers to be presented. Papers presented by
members of the Unit or intended for presentation are recorded.

Visits. During the course of research activity members of the
Unit are often required to travel locally or interstate to investigate
situations, conduct pilot studies, oversee the implementation of
programmes, introduce new tests or act in some supervisory capacity. Where
attendance at overseas conferences has occurred or is planned to occur the
opportunity to take in side visits to psychological research establishments
will be optimized. A record of visits is included in this report.

Technical Support. From time to time requests are made to this
Unit to provide specialist support to agencies outside the Army but which
are akin to Army activities or which comply with the generalized aims of
the Service and in which this Unit can provide expert assistance. This
support is recorded.

The remainder of this report is dedicated to the summary of
activities completed in the previous calendar year and a summary of ongoing
and proposed activities for the current calendar year.
SUMMARY OF ACTIVITIES
1985
RESEARCH PROJECTS AND
SERVICE PAPERS
1ST PSYCHOLOGICAL RESEARCH UNIT : COMPLETED PROJECT

TITLE:
The Role of the Australian Army Psychologist in the Selection and Allocation of Soldiers.

PROJECT PRINCIPAL: SPONSOR:
LTCOL P.N. Drake-Brockman Internal

CATEGORY OF RESEARCH:
C

AIM:
To describe the concept of negative selection and its use in the Australian Army.

ABSTRACT:
This note identifies those factors which affect the circumstances of male enlistment for the Australian Army. It is claimed that the geographic dispersion of centres of population concentration, the chronic manpower shortages, and the unwritten right of eligible individuals to bear arms in defence of their nation, has lead to the adoption of a negative selection philosophy. This philosophy is implemented by screening out unsuitable applicants in regionalized assessment centres by the use of pencil and paper testing. This method of testing is efficient in terms of time and flexibility and the introduction of Computerized Adaptive Testing (CAT) into the assessment centres is not warranted at this stage of its development. It is contended that CAT can be more appropriately applied in classification testing as a preliminary procedure in the Corps Allocation Process.

The concept of negative selection is extended into the allocation process and the method of its implementation is described.

This paper presented to the 21ST International Applied Military Psychology Symposium : Paris; 17-21 Jul 85

DISTRIBUTION: PUBLICATION TYPE:
AA Psych Corps Research Note 1/85
DPSYCH-AF
DPSYCH-N
21ST IAMPS Delegates
TITLE:
OPSIG Selection and IET

PROJECT PRINCIPAL:
MAJ R.S. Collyer

SPONSOR:
Ops Br/DPSYCH-A

CATEGORY OF RESEARCH:
A

AIM:
To review selection and IET of OPSIG and make recommendations to improve OPSIG IET pass rates.

ABSTRACT:
Whereas in 1966 the OPSIG selection procedure had an 88 to 92 percent success rate in predicting course success, by the early 1980's the course failure rate was approximately 45 percent. This research was a review of selection and initial employment training conducted to identify the causes and recommend solutions to this problem. Work demands were identified; present selection tests, including Morse code aptitude tests, and course results were analysed; operators and failed trainees were interviewed; and trainers and trade managers were consulted. Some specific problem areas have been identified and solutions were recommended.

DISTRIBUTION:
PUBLICATION TYPE:
DPSYCH-A
Service Paper to DPSYCH-A
TBA
Research Report 1/96
(in press)
TITLE:
Survey Questionnaire: New GP Boot Trials

PROJECT PRINCIPAL:
MAJ R.S. Collyer

SPONSOR:
Mat Br

CATEGORY OF RESEARCH:
B

AIM:
To provide a draft survey questionnaire for use in trialling new G.P. Boots.

ABSTRACT:
Reference R 727/1/1 (85)

DISTRIBUTION:
Mat Br

PUBLICATION TYPE:
Draft Questionnaire
TITLE:
Army Trades Information Test (ATIT)

PROJECT PRINCIPAL: MAJ L. Tomlinson
SPONSOR: DPSYCH-A

CATEGORY OF RESEARCH:
D

AIM:
To produce a trade information test suitable to discriminate between the interest and knowledge of apprentice applicants.

ABSTRACT:
Refer R727/2/57 of 3 May 85
No report produced.
Test in use for 1985 Apprentice Selection series.

DISTRIBUTION: DPSYCH-A
PUBLICATION TYPE:
Test Report to be published
1ST PSYCHOLOGICAL RESEARCH UNIT: COMPLETED PROJECT

TITLE:
Draft MIW on PSYOPS.

PROJECT PRINCIPAL: SPONSOR:
MAJ G. Wardlaw DMI

CATEGORY OF RESEARCH:
B

AIM:
To revise and rewrite chapters of the PSYOPS MIW Pamphlet. Comment on two new drafts of the entire pamphlet. Participate in the planning of the projected PSYOP's Unit organization.

DISTRIBUTION: PUBLICATION TYPE:
DMI/TRG COMD MLW Draft
TITLE:
Psych Instruction for Technician, Explosive Ordnance Disposal (TECH, EOD)

PROJECT PRINCIPAL:  SPONSOR:
MAJ R.S. Collyer  DPSYCH-A

CATEGORY OF RESEARCH:
A

AIM:
To evaluate the need for psych assistance in the selection of TECH, EOD and to write a Psych Instruction indicating the assistance to be provided.

DISTRIBUTION:  PUBLICATION TYPE:
DPSYCH-A  Psych Instruction 4/95
TITLE:
Comparative Workloads of AA Psych Corps Recruiting Based Units.

PROJECT PRINCIPAL: SPONSOR:
LTCOL P.N. Drake-Brockman DPSYCH-A

CATEGORY OF RESEARCH:
C

AIM:
To allow comparison of the workloads of AA Psych Corps recruiting based units.

ABSTRACT:
At the present time the AA Psych Corps has no way of comparing unit workloads directly, other than by the gross measure of numbers of interviews conducted per annum or per month. These figures, while they give a good indication of unit workload, are considered to be too coarse for use in decisions which may affect the movement or re-location of manpower or, in considerations which relate to unit establishments.

DISTRIBUTION: PUBLICATION TYPE:
DPSYCH-A Service Paper
R694/1/1 of 26 Nov 85
Research Note to be published.
Use of Cattell's 16PF Inventory in Selection for Australian National Antarctic Research Expeditions (ANARE).

MAJ R.S. Collyer

DPSYCH-A

The 16PF forms used in selecting ANARE expeditions were out of date and the norms used were considered to be of little relevance. A review was conducted. Recommendations were that up to date forms of Test 16PF be introduced; interim norms developed from ANARE applicants be used; and data be accumulated to enable research into personality profiles of successful/unsuccessful expeditioners. These recommendations are being implemented.
TITLE: Critique of O'Gorman Paper on Selection Research Report 9/72

PROJECT PRINCIPAL: CAPT N. J. Reynolds
SPONSOR: DPSYCH-A

CATEGORY OF RESEARCH: A

AIM: To review Research Report 8/72

ABSTRACT: The paper reviews O'Gorman's (1972) paper on Army personnel selection. The review centres on methodological criticisms and casts doubt onto the criteria used to assess selection effectiveness. It is argued that generalizations from O'Gorman's findings to today's selection procedures are of little value.

DISTRIBUTION: DPSYCH-A

PUBLICATION TYPE: Service Paper R694/1/1 of 6 Sep 85
Technical Report (proposed)
Title: XX Scaling

Project Principal: CAPT N.J. Reynolds

Sponsor: DPSYCH-A

Category of Research: A

AIM: Give historical perspective to "A" Scaling in the AA Psych Corps.

ABSTRACT: A review is given of the historical basis of XX scaling within AA Psych Corps. Recommendations are made both on current and future use of XX scales.

Distribution: DPSYCH-A

Publication Type: Service Paper

Technical Note (proposed)
TITLE:
ACER Secondment

PROJECT PRINCIPAL: SPONSOR:
LTCOL P.N. Drake-Brockman DPSYCH-A

CATEGORY OF RESEARCH:
N/A: Training Matter

AIM:
Prepare a proposal for an AA Psych Corps psychologist to be seconded to ACER for training in construction of psychology tests.

DISTRIBUTION: PUBLICATION TYPE:
DPSYCH-A Service Paper to R694-1-1 of 6 Sep 85
TITLE:
Review of Literacy in the Australian Army.

PROJECT PRINCIPAL: MAJ J.R.M. Tonkin
SPONSOR: TTCP - National Representative

CATEGORY OF RESEARCH:
Response to request from TTCP for coordinated information.

BACKGROUND/AIM:
To provide an overview of literacy assessment levels and consequences of inadequate literacy.

DISTRIBUTION: TTCP - National Representative
PUBLICATION TYPE: Service Paper
DPSYCH-A R727/2/67
TITLE:
Comment on the Effects of Posting on the Education of servicemen's Children

PROJECT PRINCIPAL: SPONSOR:
MAJ J. R. M. Tonkin DPSYCH-A

CATEGORY OF RESEARCH:
C
Response to request from DPSYCH-A

BACKGROUND/AIM:
An article in the Defence Force Journal (DFJ) Mar/Apr 85 reported on factors affecting the education of servicemen's children when posting occurs. This project commented on the content and conclusion of the article.

DISTRIBUTION: PUBLICATION TYPE:
DPSYCH-A Service Paper R694/1/1
1ST PSYCHOLOGICAL RESEARCH UNIT: SERVICE PAPER

TITLE:
Common Officer Test Battery

PROJECT PRINCIPAL:
MAJ J.R.M. Tonkin/MAJ R.S. Collyer

SPONSOR:
PDSYCH-A

CATEGORY OF RESEARCH:
A

AIM:
Evaluation of Officer Intelligence Ratings (OIR) derived from various tests of the officer test batteries.

ABSTRACT:
A common officer test battery is proposed in order to standardize tests administered to officer applicants. This will require replacement of Test AGC with Test B42 for RMC entry applicants. A comparison was made between OIR levels derived from the Test AGC and levels obtained by administering the B42 to current RMC cadets. It was concluded that differences in obtained OIRs were not significantly different.

DISTRIBUTION:
PUBLICATION TYPE:
PDSYCH-A
Psychology-in-Confidence
Service Paper
TITLE:
AReS Officer Wastage Study

PROJECT PRINCIPAL: SPONSOR:
LTCOL P.N. Drake-Brockman DPSYCH-A/DCPERS-A

CATEGORY OF RESEARCH:

AIM:
To comment on research methodology of AReS Officer Wastage Study.

DISTRIBUTION: PUBLICATION TYPE:
DPSYCH-A Service Paper
R727/1 of 28 May 85
1ST PSYCHOLOGICAL RESEARCH UNIT: SERVICE PAPER

TITLE:
ADFA Leave Policy

PROJECT PRINCIPAL: SPONSOR:
LTCOL P. N. Drake-Brockman ADFA

CATEGORY OF RESEARCH:

AIM:
To provide a psychological perspective on the ADFA leave policy.

DISTRIBUTION: PUBLICATION TYPE:
Defence Force Academy Service Paper R727/1/1
of 15 May 85
TITLE:
Norms for the 16PF: ANARE Applicants

PROJECT PRINCIPAL:
MAJ R.S. Collyer

SPONSOR:
DPSYCH-A

CATEGORY OF RESEARCH:
A

AIM:
To recommend renorming of the Test 16PF for ANARE applicants.

DISTRIBUTION:
DPSYCH-A

PUBLICATION TYPE:
Service Paper
R727/2/58 of 13 Mar 85
TITLE:
Processing Army Apprentice Applicants

PROJECT PRINCIPAL:
LTCOL P.N. Drake-Brockman

SPONSOR:
DPSYCH-A

CATEGORY OF RESEARCH:
C

AIM:
To provide a position paper as a basis for discussion on apprentice processing.

DISTRIBUTION:
DPSYCH-A

PUBLICATION TYPE:
Service Paper
R727/1/1 of 23 Apr 85
TITLE:
RAAF 16PF Norms and Why We Use Them.

PROJECT PRINCIPAL:
SGT I.M. McTaggart

SPONSOR:
Internal - S01 Psych, 3MD

CATEGORY OF RESEARCH:
A

AIM:
Provide S01 Psych, 3MD with historical information relating to the use of RAAF norms for the 16 PF.

DISTRIBUTION:
S01 Psych, 3MD

PUBLICATION TYPE:
Service Paper R727/2/58
TITLE:
Test Norms for ACER Supplied Intelligence Tests

PROJECT PRINCIPAL:
LTCOL P.N. Drake-Brockman

SPONSOR:
DPSYCH-A

CATEGORY OF RESEARCH:
A

AIM:
Provide advice to DPSYCH-A on the current state of norms of ACER supplied tests.

DISTRIBUTION:
DPSYCH A

PUBLICATION TYPE:
Service Paper
R 694/1/1
1ST PSYCHOLOGICAL RESEARCH UNIT: SERVICE PAPER

TITLE:
Test AL-AQ (2nd Edition) RAN Renorm

PROJECT PRINCIPAL:
MAJ J. R. M. Tonkin

SPONSOR:
DPSYCH-N

CATEGORY OF RESEARCH:
D

AIM:
To renorm Tests AL and AQ for the RAN using RAN raw data.

DISTRIBUTION:
DPSYCH-N

PUBLICATION TYPE:
Service Paper
R727/2/90 of 29 Feb 85
TITLE: Renorm Test AL and AQ (2nd Edition)

PROJECT PRINCIPAL: MAJ J. R. M. Tonkin
SPONSOR: DPSYCH-A

CATEGORY OF RESEARCH:
A

AIM:
To update test norms for the AL and AQ.

DISTRIBUTION: DPSYCH-A
PUBLICATION TYPE: Service Paper R 694/1/1 of 28 Feb 85 Amendment to AA Psych Corps Operating Handbook
TITLE:
Officer Resignation Statistics

PROJECT PRINCIPAL: SPONSOR:
LTCOL P.N. Drake-Brockman MS

CATEGORY OF RESEARCH:
C

AIM:
To analyse MS supplied officer resignation data.

DISTRIBUTION: PUBLICATION TYPE:
MS DPP-A Service Paper
DPSYCH-A Mr R.G. Salas R 727/2/35 (B)
TITLE:
Disposal of MGE applicants processed in 1984.

PROJECT PRINCIPAL:
LTCOL P.N. Drake-Brockman

SPONSOR:
DPSYCH-A

CATEGORY OF RESEARCH:
A

AIM:
To answer the question, "What percentage of all MGE's processed in 1984 were R(I), R(E) and R(P)?"

DISTRIBUTION:
DPSYCH-A

PUBLICATION TYPE:
Service Paper
R 694/1/1 of 7 Feb 86
1ST PSYCHOLOGICAL RESEARCH UNIT : COMPLETED PROJECT

TITLE:
Revision of Test R03M

PROJECT PRINCIPAL: SPONSOR:
MAJ J.R.M. Tonkin DPSYCH-A

CATEGORY OF RESEARCH:
A

AIM:
Replace items referring to imperial measures with items using metric measures.

ABSTRACT:
Test R03M retains an item that refers to Imperial units. Use of Metric (SI) measures is now standard in Australia and the item required replacement.

Reference to earlier research on the R03M and R03X indicated that the item could be replaced while retaining the statistical properties of the test.

DISTRIBUTION: PUBLICATION TYPE:
AA Psych Corps Technical Note in Press
DPSYCH-A Service Paper
LECTURES PRESENTED
1. TITLE : PSYCHOLOGY-IN-INTERVIEWING
PRESENTER: LTCOL P.N. Drake-Brockman
AUDIENCE: Defence Security Branch
SPONSOR : DSB
AIM : To give selected members of DSB an overview of psychopathology and how it may affect the performance of their duties.
WHEN : 6 May 85 WHERE: Russell Offices

2. TITLE : ARMY OFFICER SELECTION SYSTEMS
PRESENTER: LTCOL P.N. Drake-Brockman
AUDIENCE : Assessment Centres User Group:
Private industry personnel managers and psychologists attended. BHP sponsored seminar on assessment centres
SPONSOR : DPSYCH-A
AIM : To provide the Army's perspective on staff selection systems.
WHEN : 20/21 Aug 95 WHERE: Newcastle University

3. TITLE : AUSTRALIAN FEDERAL POLICE OCCUPATIONAL ANALYSIS
PRESENTER : MAJ R.S. Collyer
AUDIENCE : Australian Federal Police Training Officers
SPONSOR : Pers Br
AIM : To train AFP training officers to develop occupational analysis job inventories.
WHEN : 25 Jul - 4 Aug 95 WHERE: AFP Academy

4. TITLE : DEFENCE CENTRAL OCCUPATIONAL ANALYSIS COURSE
PRESENTER: MAJ R.S. Collyer
AUDIENCE : Dept of Defence and other Govt staff in the design and conduct of Occupational Analysis studies.
SPONSOR : Department of Defence (Defence Central)
AIM : To conduct (jointly with Assistant Director Occupational Analysis - Defence Central) an Occupational Analysis course.
WHEN : 27-31 May 85 WHERE: Campbell Park Offices

5. TITLE : HUMAN BEHAVIOUR IN EMERGENCIES
PRESENTER: MAJ G. Wardlaw
AUDIENCE : Defence Department, Emergency Procedures Course
SPONSOR : Department of Defence
AIM : To brief Emergency Wardens and Safety personnel on human behaviour in emergencies.
WHEN : Feb 85 WHERE: Campbell Park
SEMINARS AND CONFERENCES
ATTENDED IN 1985
1. **TITLE**: ARMED FORCES AND SOCIETY SEMINAR  
**AIM**: Presentation of a series of papers and discussion on issues affecting members of the Defence Force and their role in Society.  
**RATIONALE**: This seminar brings together viewpoints of both civilians and military on some of the sociological issues confronting Defence Force members. Material discussed is useful background for research that this Unit may conduct on Army members and the issues and problems of fitting into civilian society.  
**VENUE**: Defence Force Academy - Canberra.  
**DATE**: 26 Jul 85  
**ATTENDED BY**: LTCOL P.N. Drake-Brockman  
MAJ J.R.M. Tonkin  
MAJ R.S. Collyer

2. **TITLE**: CLINICAL SKILLS WORKSHOP  
**AIM**: To update clinical skills of Army Psychologists.  
**RATIONALE**: The workshop provides opportunity to revise and update clinical skills of military psychologists, particularly those working in a non-clinical area.  
**VENUE**: DSU Randwick  
**DATE**: 30-31 Oct 95  
**ATTENDED BY**: LTCOL P.N. Drake-Brockman  
MAJ R.S. Collyer  
**SPONSOR**: SO1 Psych 2MD  
**SEMINAR CONDUCTED BY**: Mr Tom Sutton

3. **TITLE**: EXPERIMENTAL PSYCHOLOGY CONFERENCE  
**AIM**: Provide a forum for the presentation of papers and the discussion of recent experimental psychology research findings.  
**RATIONALE**: Experimental psychology is an integral part of the research undertaken by this Unit and as such the Unit and its members need to keep abreast of developments in this area.  
**VENUE**: Newcastle University  
**DATE**: 17-19 May 85  
**ATTENDED BY**: CAPT N.J. Reynolds  
**SPONSOR**: DPSYCH-A
<table>
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<td>ATTENDED BY</td>
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</table>
PAPERS PRESENTED 1985
1ST PSYCHOLOGICAL RESEARCH UNIT : PAPERS PRESENTED 1985

1. TITLE : The role of the Australian Army Psychologist in the Selection and Allocation of Soldiers.
   TO WHOM: Delegates to the International Applied Military Psychology Symposium.
   WHERE : Paris
   WHEN: 17-21 Jun 95
   BY WHOM: LTCOL P.N. Drake-Brockman
1ST PSYCHOLOGICAL RESEARCH UNIT: VISITS 1985

1. TO WHOM: SO1 EDUCATION AND EXAMS, HQ TRG COMD
   DATE: 1 Jul 85
   AIM: To present information gained from literacy research and discuss new test construction.
   RATIONALE: Implementation of next phase of test development requiring Trg Comd and Education Corps assistance
   VISITOR: MAJ J.R.M. Tonkin

2. TO WHOM: SO1 EDUCATION OFFICER 1RTB
   DATE: 22 Jul 85
   AIM: A conference to establish guidelines and criteria for literacy test item construction.
   RATIONALE: Original charter for the development of a literacy test included co-operation between Psych Research and DAE in constructing test items.
   VISITOR: MAJ J.R.M. Tonkin

3. TO WHOM: 1RTB
   DATES: 14-17 Jul 85
   AIM: To conduct research into camouflage detection.
   RATIONALE: To collect data on perception that will aid current knowledge of the principles of camouflage.
   VISITOR: CAPT N.J. Reynolds

4. TO WHOM: Communications Units, Darwin
   DATES: 29 Jul to 2 Aug 85
   AIM: Evaluate OPSIG selection
   RATIONALE: Response to DMI request to evaluate OPSIG selection and IET
   VISITOR: MAJ R.S. Collyer

5. TO WHOM: Communications Units, Cabarlah
   DATES: 1-4 May 85
   AIM: Evaluate OPSIG training and employment
   RATIONALE: Response to DMI request to evaluate OPSIG selection and IET
   VISITOR: MAJ R.S. Collyer

6. TO WHOM: School of Signals, Watsonia
   DATE: 28 Mar 85
   AIM: To discuss selection/allocation of OPSIG
   RATIONALE: Response to DMI request to evaluate OPSIG selection and IET
   VISITOR: MAJ R.S. Collyer
<table>
<thead>
<tr>
<th>No.</th>
<th>TO WHOM</th>
<th>AIM</th>
<th>RATIONALE</th>
<th>VISITOR</th>
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<tbody>
<tr>
<td>7.</td>
<td>Communications Units, Melbourne</td>
<td>To evaluate OPSIG employment</td>
<td>Response to DMI request to evaluate OPSIG selection and IET</td>
<td>MAJ R.S. Collyer</td>
</tr>
<tr>
<td>8.</td>
<td>RAAF School of Radio, Laverton</td>
<td>To discuss selection and training of RAAF SIGSOP with psychologists and Commandant</td>
<td>Response to DMI request to evaluate OPSIG selection and IET</td>
<td>MAJ R.S. Collyer</td>
</tr>
<tr>
<td>9.</td>
<td>OPSIG Trade Management Conference, Cabarlah</td>
<td>To take part in review of OPSIG trade management.</td>
<td>Response to DMI request to evaluate OPSIG selection and IET</td>
<td>MAJ R.S. Collyer</td>
</tr>
<tr>
<td>10.</td>
<td>16 Psychology Unit</td>
<td>Conduct user trial of proposed PS 39 replacement</td>
<td>To test new instrument prior to recommending its inclusion into service.</td>
<td>CAFT N.J. Reynolds</td>
</tr>
<tr>
<td>11.</td>
<td>Australian Bomb Data Centre</td>
<td>Briefing on ABDC operations and discuss selection of bomb disposal operators.</td>
<td>This unit is conducting research into selection of trainees for bomb disposal type work.</td>
<td>LTCOL P.N. Drake-Brockman, MAJ R.S. Collyer</td>
</tr>
<tr>
<td>TO WHOM</td>
<td>PUBLICATION TYPE</td>
<td>NATURE</td>
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<td>--------------------------------------------</td>
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</tbody>
</table>
|            |                                            | 1. TO WHOM : DPSYCH-N  
|            |                                            | NATURE : Assistance in calibration of psychological test A-L-AQ (2nd Ed)  
|            |                                            | PUBLICATION TYPE: Official letter                                      |
|            |                                            | 2. TO WHOM : TTCP UTP3 Representative  
|            |                                            | NATURE : Short report on the use of Biographical data as a selection measure  
|            |                                            | PUBLICATION TYPE: Minute to TTCP UTP3 representative                     |
|            |                                            | 3. TO WHOM : CARO  
|            |                                            | NATURE : Discussion on the use of rater tendency information  
|            |                                            | PUBLICATION TYPE: Computer printout                                   |
|            |                                            | 4. TO WHOM : TTCP UTP3 Representative  
|            |                                            | NATURE : Use of Computerized Adaptive Testing in the Australian Army  
|            |                                            | PUBLICATION TYPE: Minute to TTCP UTP3 representative for M.F. Wiskoff. US National Leader TTCP UTP3 |
|            |                                            | 5. TO WHOM : MAJ L. Tomlinson  
|            |                                            | NATURE : Statistical Analysis of Apprentice Test data  
|            |                                            | PUBLICATION TYPE: Computer printout                                   |
|            |                                            | 6. TO WHOM : LTCOL N. Hall  
|            |                                            | NATURE : Statistical Analysis of Officer Health data  
|            |                                            | PUBLICATION TYPE: Computer printout                                   |
|            |                                            | 7. TO WHOM : 3RNSWR  
|            |                                            | NATURE : Areas interviews conducted by MAJ G. Wardlaw.  
|
COURSES ATTENDED 1995
1ST PSYCHOLOGICAL RESEARCH UNIT: COURSES ATTENDED 1985

<table>
<thead>
<tr>
<th></th>
<th>NAME</th>
<th>COURSE</th>
<th>INSTITUTION</th>
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<tbody>
<tr>
<td>1</td>
<td>LTCOL P. Drake-Brockman</td>
<td>Graduate Diploma in Statistics</td>
<td>Canberra College of Advanced Education</td>
</tr>
<tr>
<td>2</td>
<td>MAJ J.R.M. Tonkin</td>
<td>Graduate Diploma in Educational Studies</td>
<td>Riverina College of Advanced Education</td>
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<tr>
<td>3</td>
<td>CAPT N.J. Reynolds</td>
<td>Doctor of Philosophy</td>
<td>Australian National University</td>
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<tr>
<td>4</td>
<td>PTE S. Bonfield</td>
<td>Introduction to BASIC language</td>
<td>Defence Training Centre</td>
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<tr>
<td>5</td>
<td>CPL N. Hewitt</td>
<td>SAS BASICS</td>
<td>Defence Training Centre</td>
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<tr>
<td>6</td>
<td>PTE S. Bonfield</td>
<td>Introduction to Computing</td>
<td>Defence Training Centre</td>
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COMPLETED COMPUTER TASKS 1985
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<th>TASK</th>
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<tbody>
<tr>
<td>1.</td>
<td>Apprentice Test Statistical Analysis</td>
<td>Statistical Analysis as directed</td>
<td>MAJ L. Tomlinson</td>
</tr>
<tr>
<td>2.</td>
<td>English Skills Attainment - Statistical Analysis</td>
<td>Statistical Analysis as directed</td>
<td>MAJ J.R.M. Tonkin</td>
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<tr>
<td>3.</td>
<td>Renorm of MGE Test Battery</td>
<td>Statistical Analysis as directed</td>
<td>CAPT N.J. Reynolds</td>
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<tr>
<td>4.</td>
<td>Unit workload - MGE equivalents</td>
<td>Statistical Analysis as directed</td>
<td>LTCOL P.N. Drake-Brockman</td>
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<td>5.</td>
<td>Unit Workloads</td>
<td>Statistical Analysis as directed</td>
<td>DPSYCH-A</td>
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<td>6.</td>
<td>Test AL and AQ Renorm for RAN</td>
<td>Statistical Analysis as directed</td>
<td>MAJ J.R.M. Tonkin</td>
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<tr>
<td>7.</td>
<td>Accept Psych - Reject EO</td>
<td>Statistical Analysis as directed</td>
<td>MAJ J.R.M. Tonkin</td>
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<tr>
<td>8.</td>
<td>Conversion from SCOPE to NOS on CSIRONET</td>
<td>To create means by which to access CSIRONET on the NOS system, and convert programs and data to the new format</td>
<td>CPL N. Hewitt</td>
</tr>
<tr>
<td>9.</td>
<td>Conversion from SCOPE to NOS on CSIRONET</td>
<td>Sort and merge the library containing log sheet data into workable and cost efficient files on the NOS system</td>
<td>CPL N. Hewitt</td>
</tr>
<tr>
<td>10.</td>
<td>Operate SIRIUS on CSIRONET</td>
<td>To use the SIRIUS terminal as a means of accessing CSIRONET</td>
<td>CPL N. Hewitt</td>
</tr>
<tr>
<td>11.</td>
<td>Rejection on School of Signals Courses</td>
<td>Statistical Analysis as directed</td>
<td>MAJ R.S. Collyer</td>
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<td>12.</td>
<td>Officer Health Survey</td>
<td>Statistical Analysis as directed</td>
<td>LTCOL W. Hall</td>
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<tr>
<td>13.</td>
<td>Conversion of interviews to MGE equivalents</td>
<td>Convert exam codes to MGE equivalents of time</td>
<td>LTCOL P.N. Drake-Brockman</td>
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<tr>
<td>14.</td>
<td>Analysis of MGE rejects</td>
<td>Statistical Analysis as directed</td>
<td>DPSYCH-A</td>
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</tbody>
</table>
LIBRARY ASSISTANCE 1995
1ST PSYCHOLOGICAL RESEARCH UNIT : LIBRARY ASSISTANCE 1985

1. Provided To:
   Senate National Resources Committee
   RAN Staff College
   ADFA Writing Team
   QLD Police Academy
   13 Psych Unit
   17 Psych Unit
   DPSYCH-A
   CDT C. Goggin, Psychologist, Army HQ, DUBLIN, EIRE
   16 Psych Unit
   Student Counsellor OCS
   11 Psych Unit
   LTCOL L. Grant
   DPSYCH-AF
   Defence Regional Library, Victoria
   14 Psych Unit
   School of Army Health
   CAPT Knowles
   1 Psych Unit
   DPSYCH-N
   Department of Aviation
   CAPT Cotton - 6MD
   Educ Section RAAF Townsville
   Dr Jarvis, CSE
   EDE Ascot Vale - VIC
   1CAMD - Orchard Hills
   HMAS Watson
   DRC Salisbury
   Australian Federal Police Academy
   Assistant Director Occupational Analysis - Defence Central
   Director of Personnel Plans - Army

2. Received From:
   HQ TRG COMD
   USAF
   Area Psych, Navy, Melbourne
   HQ 3MD
   DCL
   USN
   ADOA
   Dept of Navy (US)
   Institute for Social Research, University of Michigan (USA)
   Australian Council for Educational Research
   Navy Psychologist, DFRC, Adelaide
   DCC
   RAAF
   Office of Assistant Secretary of Defense (USA)
   HQ 2MD
   US Air Force Human Resources Laboratory
   US Naval Health Research Centre
   US Navy Personnel Research and Development Centre
   US Army Research Institute for Behavioural and Social Sciences
   Canadian Forces Personnel Applied Research Unit
   Army Personnel Research Establishment - UK
   Admiralty Marine Technology Establishment - UK
   Defence Psychology Unit - NZ
RESEARCH PROJECTS
TITLE:

Computerized Adaptive Psychological Testing

PROJECT PRINCIPAL: SPONSOR:

CAPT N.J. Reynolds DPSYCH-A

CATEGORY OF RESEARCH:

D

PRIORITY: REPORT NUMBER/REFERENCE:

1 TBA

AIM:

To investigate methods of introducing computerized testing into the Australian Army.

BACKGROUND:

Recent innovations in psychometric theory have resulted in the development of computerized psychological testing. Several countries, including Australia, are investigating the possibility of using this form of testing for defence force personnel selection. A feasibility study has been completed and submitted for consideration. Work is underway on development of tests and software to be used for presenting items.

INTERMEDIATE OBJECTIVES:

- Assessment of feasibility
- Production of computer support proposal
- Production of software
- Reviewing overseas developments
- Development of tests
- Reliability and Validity Assessment

COMPUTER SUPPORT REQUIREMENT:

Most program development work will be done within the Unit. It is not expected that consultancy will be required although some programs will be purchased from outside sources.

PROPOSED DISTRIBUTION: PROPOSED PUBLICATION TYPE:

AA Psych Corps Research Report
TITLE:
Norms: Evaluation and Development Report - Officers (PR19)

PROJECT PRINCIPAL:
CAPT N. J. Reynolds

SPONSOR:
DPSYCH-A

CATEGORY OF RESEARCH:
A

PRIORITY:
2

REPORT NUMBER/REFERENCE:
R727/1/18 of 19 Jul 85

AIM:
To provide "T" score norms for PR19 for use in officer management.

BACKGROUND:
DPSYCH-A is responsible for the production of "T" score norms and their quality control.

INTERMEDIATE OBJECTIVES:
To be completed annually by the month of May.

COMPUTER SUPPORT REQUIREMENT:
Data analysis using SPSS - Unit computer resources.

PROPOSED DISTRIBUTION:
DPSYCH-A

PROPOSED PUBLICATION TYPE:
Service Paper
1ST PSYCHOLOGICAL RESEARCH UNIT : CURRENT PROJECT

TITLE:
Validation of Literacy Assessment Test

PROJECT PRINCIPAL:      SPONSOR:
MAJ R.M. Tonkin          COPS-A

CATEGORY OF RESEARCH:
D

PRIORITY:      REPORT NUMBER/REFERENCE:
1             TBA

AIM:
To correlate Literacy Assessment performance (scores) of MGE recruits with an objective measure of literacy behaviour.

BACKGROUND:
The Literacy Assessment Test is a group administered test. Its construct validity should be evaluated by establishing the relationship between test scores and an independent assessment of reading and writing.

INTERMEDIATE OBJECTIVES:
Administration of Literacy Tasks at IRTB - Apr 86
Analysis of Data and Correlational Studies - May 86

COMPUTER SUPPORT REQUIREMENT:
Data Analysis using SPSS - Unit computer resources

PROPOSED DISTRIBUTION: PROPOSED PUBLICATION TYPE:
AA Psych Corps          Research Note
DAE-A (Probable)
1ST PSYCHOLOGICAL RESEARCH UNIT: CURRENT PROJECT

TITLE:
Local Admin Survey of PTE-CPL in ACT

PROJECT PRINCIPAL:
MAJ R.S. Collyer

SPONSOR:
Local Admin (ACT)

CATEGORY OF RESEARCH:
B

PRIORITY:

REPORT NUMBER/REFERENCE:
3 T3A

AIM:
To survey PTE-CPL in Canberra Local Admin area of administration with reference to accommodation and living standards.

BACKGROUND:
Single members accommodation is unsatisfactory and living costs are high in Canberra. The survey aims to collect data which, when analysed, can be used for further action.

INTERMEDIATE OBJECTIVES:
Draft Questionnaire Dec '85
Review Questionnaire Feb '86
Commence Report Jun '86

COMPUTER SUPPORT REQUIREMENT:
Unit resources plus data transcription services.

PROPOSED DISTRIBUTION:
Unrestricted

PROPOSED PUBLICATION TYPE:
Report to Local Admin Research Note
TITLE:
Survey of Literacy Requirements for Initial Employment Training

PROJECT PRINCIPAL: SPONSOR:
MAJ J. R. M. Tonkin COPS-A

CATEGORY OF RESEARCH:
C

PRIORITY: REPORT NUMBER/REFERENCE:
1 TBA

AIM:
To obtain information on level of literacy required to meet training objectives in each Initial Employment Training course.

BACKGROUND:
Research is a necessary complement to development of literacy assessment. Soldiers will be allocated so as to optimise the match between literacy requirement and literacy ability.

INTERMEDIATE OBJECTIVES:
Administration of Survey Questionnaire to Corps Schools (Completed)
Analysis of data and compilation of IET literacy levels. Validation - analysis of trainee performances.

COMPUTER SUPPORT REQUIREMENT:
Data Analysis using SPSS - computer resources within Unit.

PROPOSED DISTRIBUTION: PROPOSED PUBLICATION TYPE:
AA Psych Corps Research Note
TRG COMD (probable)
TITLE:
Army Community Services Psych Instruction

PROJECT PRINCIPAL: SPONSOR:
MAJ R.S. Collyer DPS/Chief Social Worker

CATEGORY OF RESEARCH:
A

PRIORITY: REPORT NUMBER/REFERENCE:
3 T9A

AIM:
To write a Psych Instruction for use in selecting Army Community Services personnel.

BACKGROUND:
Chief Social Worker believes present procedures are unsatisfactory and that better guidelines are needed.

INTERMEDIATE OBJECTIVES:
Draft Feb 96

COMPUTER SUPPORT REQUIREMENT:
NIL

PROPOSED DISTRIBUTION: PROPOSED PUBLICATION TYPE:
DPSYCH-A Draft Psych Instruction
1ST PSYCHOLOGICAL RESEARCH UNIT : CURRENT PROJECT

<table>
<thead>
<tr>
<th>TITLE:</th>
<th>Development of Army Literacy Assessment.</th>
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<td>PROJECT PRINCIPAL:</td>
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<tr>
<td>MAJ J. R.M. Tonkin</td>
<td>COPS-A</td>
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<td>T9A</td>
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AIM:
To construct, trial and implement a measure of literacy for application to soldier employment allocation.

BACKGROUND:
Literacy has largely been assessed by school education results (in English) presented by soldiers. Increasing difficulty has been experienced in interpreting and comparing such results.

INTERMEDIATE OBJECTIVES:
Evaluation of current literacy levels - completed.
Construction and Evaluation of testing items - February 95
Assembly and Implementation of Literacy Test - June 96

COMPUTER SUPPORT REQUIREMENT:
Data analysis using SPSS - Unit computer resources.

PROPOSED DISTRIBUTION: PROPOSED PUBLICATION TYPE:
COPS-A Research Note
TRG COMD Intermediate Service Papers
UPSYCH-A
AA Psych Units
TITLE:
Unit Workloads

PROJECT PRINCIPAL:  
LTCOL P.N. Drake-Brockman

SPONSOR:  
Internal

CATEGORY OF RESEARCH:  
C

PRIORITY:  
3

REPORT NUMBER/REFERENCE:  
T9A

AIM:  
To provide a methodology for the comparison of AA Psych Corps Unit workloads.

BACKGROUND:  
To enable Unit workloads to be monitored.
To provide basis for manpower management and establishment review.

INTERMEDIATE OBJECTIVES:  
Brief to DPSYCH-A forwarded Dec 85
RN for publication Mar 86

COMPUTER SUPPORT REQUIREMENT:  
Analysis of previous workloads to establish calculation formulas.

PROPOSED DISTRIBUTION:  
AA Psych Corps

PROPOSED PUBLICATION TYPE:  
Service Paper to DPSYCH-A Research Notes
1ST PSYCHOLOGICAL RESEARCH UNIT : CURRENT PROJECT

---

**TITLE:**
Ammunition Technician (CAT) and Ammunition Technical Officer (ATO) Psych Instructions

---

**PROJECT PRINCIPAL:**
MAJ R.S. Collyer

**SPONSOR:**
DPSYCH-A

---

**CATEGORY OF RESEARCH:**
A

---

**PRIORITY:**
2

**REPORT NUMBER/REFERENCE:**
TBA

---

**AIM:**
To write Psych Instructions for the selection of AT/ATO.

---

**BACKGROUND:**
An approach through DPSYCH-A has been made by ABDC and DGSUP to develop selection procedures.

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**COMPUTER SUPPORT REQUIREMENT:**
NIL

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**PROPOSED DISTRIBUTION:**
DPSYCH-A

**PROPOSED PUBLICATION TYPE:**
Draft Psych Instruction
1ST PSYCHOLOGICAL RESEARCH UNIT : CURRENT PROJECT

TITLE:
Clinical Judgement Model

PROJECT PRINCIPAL: SPONSOR:
LTGOL P.N. Drake-Brockman DPSYCH-A

CATEGORY OF RESEARCH:
C

PRIORITY: REPORT NUMBER/REFERENCE:
1 TBA

AIM:
To develop a package to provide guidance for the implementation of the Clinical Judgement Model.

BACKGROUND:
It has been decided that previous research work will be used as a basis for the implementation of an actuarially based negative selection system which uses criteria moderating variables.

INTERMEDIATE OBJECTIVES:
Lecture Package to be developed by Jun 86.
Monitoring package to be developed by Aug 96.

COMPUTER SUPPORT REQUIREMENT:
Current data analysis packages will require modification to incorporate and analyse new data.

PROPOSED DISTRIBUTION: PROPOSED PUBLICATION TYPE:
Lecture presentation to Pers Br. Service Paper
All AA Psych Corps Units
1ST PSYCHOLOGICAL RESEARCH UNIT : CURRENT PROJECT

TITLE:
Officer Resignation Questionnaire

PROJECT PRINCIPAL:  SPONSOR:
LTCOL P. N. Drake-Brockman  Internal

CATEGORY OF RESEARCH:
C

PRIORITY:  REPORT NUMBER/REFERENCE:
1  T3A

AIM:
To identify reasons for officer resignation.

BACKGROUND:
To receive biographical survey data on resigning officers to allow timely provision of reasons of officer resignation.
To be administered to resigning officers and a matched sample of serving officers.

INTERMEDIATE OBJECTIVES:
1st Draft Questionnaire  May 86
Pilot Questionnaire  Jun 86
Review/amend Questionnaire  Aug 96
Present completed Questionnaire for MS approval Sep 86.

COMPUTER SUPPORT REQUIREMENT:
Data analysis: t-tests and cross tabulations.

PROPOSED DISTRIBUTION:  PROPOSED PUBLICATION TYPE:
DPSYCH-A  Research Report
MS
AA Psych Corps
TTCP
1ST PSYCHOLOGICAL RESEARCH UNIT: CURRENT PROJECT

TITLE:
Reviews of Personnel Reporting Systems

PROJECT PRINCIPAL: SPONSOR:
CAPT N.J. Reynolds MS/CARO/DPSYCH-A

CATEGORY OF RESEARCH:
A

PRIORITY: REPORT-NUMBER/REFERENCE:
1 Research Note 3/85

AIM:
To ensure that personnel reports for both officers and other ranks accurately and fairly represent performance during the rating period.

BACKGROUND:
DPSYCH-A has technical control of the personnel reports used to assess performance of soldiers and officers. 1 Psych Research Unit does research in support of this role.

INTERMEDIATE OBJECTIVES:
Research note completed, ongoing research as required.

COMPUTER SUPPORT REQUIREMENT:
In house.

PROPOSED DISTRIBUTION: PROPOSED PUBLICATION TYPE:
Within AA Psych Corps (Research Note); Research Note 3/85, plus MS, CARO (continuing reviews).
continuing reviews.
TITLE: Development of Biographical Data Sheet

PROJECT PRINCIPAL: CAPT N. J. Reynolds

SPONSOR: OPSYCH-A

CATEGORY OF RESEARCH: A, D

PRIORITY: REPORT NUMBER/REFERENCE:

1 TBA

AIM: To construct a standardized form which will be used in the collection of biographical data in a form suitable for computerization and incorporation into a database.

BACKGROUND: This project was initiated as part of the suite of techniques aimed at both validating current selection methods and providing a means for easy development of new procedures.

INTERMEDIATE OBJECTIVES: Development and production of sheet envisaged to be completed by Apr 1986.

COMPUTER SUPPORT REQUIREMENT: In house development of data-base structure and access programs.

PROPOSED DISTRIBUTION: PROPOSED PUBLICATION TYPE:

OPSYCH-A PS 89 Service Paper
1ST PSYCHOLOGICAL RESEARCH UNIT: CURRENT PROJECT

TITLE:
Test Norming

PROJECT PRINCIPAL: SPONSOR:
CAPT N.J. Reynolds DPSYCH-A

CATEGORY OF RESEARCH:
A

PRIORITY: REPORT NUMBER/REFERENCE:
1 Research Note 2/85

AIM:
Development and implementation of standard operating procedures for norming tests.

BACKGROUND:
Given the development of a computerized data base, standard norming procedures are being developed where the old manual procedure is replaced by a fully computerized procedure.

INTERMEDIATE OBJECTIVES:
Program for norming developed and applied to a number of tests (including the RO3X, for which a research note was written describing the procedure). Standard operating procedures will be introduced after installation of new computing equipment at 1 Psych Research.

COMPUTER SUPPORT REQUIREMENT:
In-house, to be implemented on new computer system, currently working on CSIRO computer and SIRIUS computer.

PROPOSED DISTRIBUTION: PROPOSED PUBLICATION TYPE:
Within Corps Research Note 2/85, Standard Operating Procedures.
1ST PSYCHOLOGICAL RESEARCH UNIT: CURRENT PROJECT

TITLE:
Visual Detection Project.

PROJECT PRINCIPAL:
CAPT N.J. Reynolds

SPONSOR:
1 Psych Research Unit

CATEGORY OF RESEARCH:
E

PRIORITY:
REPORT NUMBER/REFERENCE:
3
T3A

AIM:
To assess the influence of display factors in visual detection with particular reference to camouflage.

BACKGROUND:
The study is presenting soldiers with computer displays and assessing both how much information can be assimilated from the display and which display factors dominate the perception.

INTERMEDIATE OBJECTIVES:
Experiment one completed Nov 95. Further experiments will be performed at irregular intervals within 1986 and 1987. The next experiment is scheduled for March 1986.

COMPUTER SUPPORT REQUIREMENT:
Nil use of Unit resources. Personal computing equipment and programming by CAPT Reynolds.

PROPOSED DISTRIBUTION:
Within Corps, Overseas Research Agencies, Interested Academic Researchers.

PROPOSED PUBLICATION TYPE:
1ST PSYCHOLOGICAL RESEARCH UNIT : CURRENT PROJECT

TITLE:
Review and Development of Psychological Database

PROJECT PRINCIPAL: CAPT N.J. Reynolds
SPONSOR: DPSYCH-A

CATEGORY OF RESEARCH:
A

PRIORITY:
REPORT NUMBER/REFERENCE:
3 TBA

AIM:
Integration of test information, biographical data and criterion measures to provide a basis for validation and modification of selection procedures.

BACKGROUND:
In addition to the biographical data sheet outlined above, several data sheets are under development which will give criterion measures against which selection procedures can be assessed.

INTERMEDIATE OBJECTIVES:
Introduction of data sheet for completion at Recruit Training to coincide with Introduction of biographical data sheet (Apr 86).

COMPUTER SUPPORT REQUIREMENT:
In house development of database.

PROPOSED DISTRIBUTION:
PROPOSED PUBLICATION TYPE:
NIL NIL
# 1ST PSYCHOLOGICAL RESEARCH UNIT: PROPOSED PROJECT

## TITLE:
User Instruction on Banded T-Scores

## PROJECT PRINCIPAL:  
SPONSOR:  
LT COL P. N. Drake-Brockman  
DPSYCH-A

## CATEGORY OF RESEARCH:
C

## PRIORITY:  
REPORT NUMBER/REFERENCE:  
3  
T3A

## AIM:
Provide MS and Corps Directorates with descriptive information on banded T-scores, their use and their limitations.

## BACKGROUND:
Descriptive and explanatory information on the use and limitations of banded T-Scores would be appreciated by some Corps Directorates.

## INTERMEDIATE OBJECTIVES:
Completed by Jun 96.

## COMPUTER SUPPORT REQUIREMENT:
NIL

## PROPOSED DISTRIBUTION:  
PROPOSED PUBLICATION TYPE:
Pers Branch (MS)  
Service Paper  
Corps Directorates  
or Technical Notes  
DPSYCH-A
TITLE: Linking of Test Logs and A244.

PROJECT PRINCIPAL: LTCOL P. N. Drake-Brockman

SPONSOR: Internal

CATEGORY OF RESEARCH: C

PRIORITY: 1

AIM: To review the form AAP A244 and the cutoffs which currently apply to it. Consider the inclusion of the form in the Unit data bank.

BACKGROUND: Responsibility for the A244 has been passed to this Unit and the data needs to be coordinated with data already collected.

INTERMEDIATE OBJECTIVES: To be completed at the same time the Clinical Judgement Model monitoring project is completed.

COMPUTER SUPPORT REQUIREMENT: Unit computer support

PROPOSED DISTRIBUTION: DPSYCH-A

PROPOSED PUBLICATION TYPE: Psych Instruction
**1ST PSYCHOLOGICAL RESEARCH UNIT : PROPOSED PROJECT**

**TITLE:**
Evaluate Various Tests of Critical Reasoning.

**PROJECT PRINCIPAL:**
LTCOL P.N. Drake-Brockman

**SPONSOR:**
Internal

**CATEGORY OF RESEARCH:**
C

**PRIORITY:**
3

**AIM:**
To introduce a test to assess an officer's ability in the areas of advanced comprehension and ability to draw logical conclusions from information with literacy and numeracy biases.

**BACKGROUND:**
Psychological information, particularly that relating to intelligence and clerical ability becomes outdated. When officers are being considered for Command and Staff College or even for promotion to LTCOL or high rank levels it is considered that a critical reasoning test is likely to provide valuable information to assist in decision making.

**INTERMEDIATE OBJECTIVES:**
Review higher level management selection tests and consider developing management selection test. Obtain information from ACER (Vic) and Educational and Testing Service (Princeton N.J.)

**COMPUTER SUPPORT REQUIREMENT:**
During evaluation of results support can be provided from Unit facilities.

**PROPOSED DISTRIBUTION:**
Within AA Psych Corps
Other Corps Directorates
Other Psych Services
Pers Br

**PROPOSED PUBLICATION TYPE:**
Technical Note
 Parameters of Performance of Resigning Officers

AIM:
To investigate the quality of the resigning officers.

BACKGROUND:
To investigate the performance profile of the resigning officer and compare them with a matched sample non-resigning officers.
Can the Army afford to lose officers of the calibre who resign?

INTERMEDIATE OBJECTIVES:
Access MS information relating to promotability, T-score and word pictures. Construct analyse word pictures. Investigate the importance of OIR.

COMPUTER SUPPORT REQUIREMENT:
Unit computer support required.

PROPOSED DISTRIBUTION:
AA Psych Corps
Other Services
Appropriate Army Departments
TTCP
TITLE: Renorm Test OHC

PROJECT PRINCIPAL: CAPT N.J. Reynolds

SPONSOR: DPSYCH-A

CATEGORY OF RESEARCH: A

PRIORITY: 2

AIM: Construct revised age norms derived from recent applicant data

BACKGROUND: Test OHC is routinely administered as part of applicant test batteries. Selection criteria is dependent on norms which should reflect current trends.

INTERMEDIATE OBJECTIVES: To be completed by Mar 96.

COMPUTER SUPPORT REQUIREMENT: Unit Computer resources only.

PROPOSED DISTRIBUTION:

AA Psych Corps
DPSYCH-N

PROPOSED PUBLICATION TYPE:

Technical Note
Draft Psych Instruction
TITLE:
Renorming of Tests B42, AL and AQ.

PROJECT PRINCIPAL:
CAPT N. J. Reynolds

SPONSOR:
DPSYCH-A

CATEGORY OF RESEARCH:
A

PRIORITY:
2

AIM:
To construct revised age norms derived from recent applicant data.

BACKGROUND:
Tests B42, AL and AQ are routinely administered as part of applicant test batteries. Selection criteria is dependent on norms which should reflect current trends.

INTERMEDIATE OBJECTIVES:
Complete by Mar 96.

COMPUTER SUPPORT REQUIREMENT:
Unit computer resources.

PROPOSED DISTRIBUTION:
AA Psych Corps

PROPOSED PUBLICATION TYPE:
Technical Notes
Draft Psych Instruction
TITLE:
Application of a Work Orientation Scale to Predict Trainee Performance.

PROJECT PRINCIPAL: SPONSOR:
MAJ J. R. M. Tonkin Internal

CATEGORY OF RESEARCH:
C

PRIORITY: REPORT NUMBER/REFERENCE:
3 TBA

AIM:
To evaluate a CPI derived measure of work motivation and assess its utility in predicting the motivation factor in Trainees potential for passing or failing a course.

BACKGROUND:
Previous AA Psych studies have examined the relationship between such factors as test performance, biographical data and personality and passing and failing courses. Many studies have concluded that motivation is a likely cause of failure where other factors have shown little or no relationship. If motivation for work may be measured then more effective trainee prediction may be possible.


INTERMEDIATE OBJECTIVES:
Select suitable trainee populations. Administer questionnaire. Analyse results.

COMPUTER SUPPORT REQUIREMENT:
Unit computer resources.

PROPOSED DISTRIBUTION: PROPOSED PUBLICATION TYPE:
AA Psych Corps Research Note
TRG COMD
LECTURES/SEMINARS PROPOSED TO PRESENT
TITLE: MEASUREMENT OF READING POTENTIAL

PRESENTER: MAJ J.R.M. Tonkin

TO WHOM: Riverina College Graduate Diploma in Literacy, Residential course students

WHEN: May 86

WHERE: Riverina College, Wagga, NSW

AIM: To present some issues in the measurement of reading potential using psychological and other tests.

RATIONALE: Measurement of reading potential is one of the primary areas covered in the Grad Dip Literacy course. It also appears to be one most subject to misconception and doubtful assumption. For example, intelligence tests are frequently used to measure reading potential with IQ's being interpreted as potential reading ages. Purpose of seminar/discussion is to clarify some of these issues and propose more suitable methods of measuring reading potential.
SEMINARS AND CONFERENCES PROPOSED TO ATTEND
1. **TITLE:** ANNUAL CONFERENCE OF AUSTRALIAN PSYCHOLOGICAL SOCIETY  
**LOCATION:** Townsville  
**DATES:** 25-29 Aug 96  
**AIM:** To maintain currency in research conducted in Australia  
**DELEGATES:** LTCOL P.N. Drake-Brockman  
MAJ J.R.M. Tonkin  
MAJ R.S. Collyer  
**SPONSOR:** 1 Psych Research Unit  
**RATIONALE:** a. Allow attending psychologists to remain up to date on current psychological research in Australia.  
b. Develop and maintain contacts in the psychology field.  
c. Show the Army as a major employer of psychologists and user of modern research techniques.  
**PAPERS:** Paper on use of job analysis rating scales in identifying the physical demands of employments to be presented by MAJ R.S. Collyer.

2. **TITLE:** EXPERIMENTAL PSYCHOLOGY CONFERENCE  
**LOCATION:** MONASH UNIVERSITY  
**DATES:** 16-18 May 96  
**AIM:** To maintain currency in experimental psychology research and methodology in Australia  
**DELEGATE:** CAPT N.J. Reynolds  
**SPONSOR:** 1 Psych Research Unit  
**RATIONALE:** a. Allow attending psychologists to remain up to date on current psychological research in Australia.  
b. Develop and maintain contacts in the psychology field.  
c. Show the Army as a major employer of psychologists and user of modern research techniques.  
**PAPERS:** Paper on visual detection research to be presented by CAPT N.J. Reynolds.

3. **TITLE:** ARMED FORCES AND SOCIETY SEMINAR  
**LOCATION:** Defence Force Academy, Canberra  
**DATE:** 26 Jul 96  
**AIM:** Presentation of a series of papers and discussion on issues affecting members of the Defence Force and their role in society.  
**DELEGATES:** LTCOL P.N. Drake-Brockman  
MAJ J.R.M. Tonkin  
MAJ R.S. Collyer  
CAPT N.J. Reynolds  
**SPONSOR:** 1 Psych Research Unit  
**RATIONALE:** The seminar brings together viewpoints of both civilians and military on some of the sociological issues confronting Defence Force members. Material discussed is useful background for research that this Unit may conduct on Army members and the issues and problems of fitting into a civilian society.
PROPOSED VISITS
1ST PSYCHOLOGICAL RESEARCH UNIT: VISITS 1986

1. WHERE: TRAINING COMMAND
RATIONALE: Discuss research and development of Literacy and Numeracy Tests
BY WHOM: LTCOL P.N. Drake-Brockman
          MAJ J.R.M. Tonkin
DURATION: 1 Day

2. WHERE: 1 RTB KAPOOKA
RATIONALE: Validate Literacy Test
BY WHOM: MAJ J.R.M. Tonkin
DURATION: 2 x 2 Days

3. WHERE: 1 RTB KAPOOKA
RATIONALE: Collect data for camouflage research
BY WHOM: CAPT N.J. Reynolds
DURATION: 2 x 4 Days

4. WHERE: HQ 2MD
RATIONALE: Discuss selection models with Dist Psych Offr
BY WHOM: LTCOL P.N. Drake-Brockman
DURATION: 2 Days

5. WHERE: Australian Council for Educational Research, Melbourne
RATIONALE: To discuss item analysis and use of Rasch model for Literacy Test data.
BY WHOM: MAJ J.R.M. Tonkin
DURATION: 1 Day
PROPOSED TECHNICAL SUPPORT
1ST PSYCHOLOGICAL RESEARCH UNIT : TECHNICAL SUPPORT (1986)

1. TO WHOM : MAJ K.E. Quinn
   NATURE : Statistical Analysis of the Career Intentions of Service Women project
   PUBLICATION TYPE: Computer Printout
COURSES
1ST PSYCHOLOGICAL RESEARCH UNIT : COURSE ATTENDANCE (1986)

<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Qualification</th>
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<tbody>
<tr>
<td>1.</td>
<td>LTCOL P.N. Drake-Brockman</td>
<td>Grad. Dip. Stats, CCAE.</td>
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<tr>
<td>3.</td>
<td>CAPT N.J. Reynolds</td>
<td>PhD, ANU.</td>
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<tr>
<td>4.</td>
<td>SGT R. Dawson</td>
<td>BBus, DDIAE.</td>
</tr>
<tr>
<td>5.</td>
<td>CPL N. Hewitt</td>
<td>BSc, ANU.</td>
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1ST PSYCHOLOGICAL RESEARCH UNIT : CURRENT COMPUTER TASKS

1. TASK : Unit Management Output
AIM : To create a program that can access log sheet data and produce Unit processing rates and rejection rates.
SPONSOR: DPSYCH-A

2. TASK : The Australian Army Literacy Test
AIM : To create statistical programs for the analysis of results and the development of the Literacy Test.
SPONSOR: MAJ J. R. M. Tonkin

3. TASK : Document upgraded functions of the Units computing cell
AIM : To implement and document the computing cells operations as new developments arise, either in the form of new computer hardware or in procedures for documenting the processing of jobs.
SPONSOR: Internal
1ST PSYCHOLOGICAL RESEARCH UNIT: PROPOSED COMPUTER TASKS

1. TASK: Development of Unit Computing SOP
   AIM: Update and extend Unit Computing SOP's when new hardware becomes available.
   SPONSOR: Internal

2. TASK: Career Intentions of Service Women
   AIM: To produce statistical analysis as directed.
   SPONSOR: MAJ K.E. Quinn, DPP
DISTRIBUTION LISTS
LIST A - WITHIN AA PSYCH CORPS

LIST B - OTHER AUSTRALIAN SERVICES

LIST C - REST OF AUSTRALIA

LIST D - OVERSEAS

LIST E - SUPPLEMENTARY LIST
END

12-86

DITC