ROYAL CANADIAN AIR FORCE



REPAIR DEPOTS FUNCTION & ORGANIZATION

(This EO replaces EO 00-50-13 dated 21 Dec 54)

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

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REPAIR DEPOTS FUNCTION & ORGANIZATION

ROLE

- The role of a Repair Depot in the RCAF is defined as follows:-
- (a) To provide an advanced training facility for a proportion of technical officers and higher grouped tradesmen.
- (b) To provide a flexible service repair organization to support RCAF Field Units in maintenance and repair problems beyond unit capacity.
- In general the role of the Repair Depot is accomplished by developing and producing trained personnel, qualified to assume positions of responsibility in CHQs, TSUs and supervisory posts in Service formations. The training will include all phases of Technical Management, Quality Control, Engineering, Administration, Supervision and on-the-job Application. Additionally, and in conjunction with the above training, the Repair Depot will produce a useful work output applying sound, effective, economical management techniques and engineering principles.
- 3 The successful accomplishment of the Depot's assigned role is, to a major degree, dependent upon, first, an adequately planned and programmed workload of modern equipments thus providing the end product to the pipeline as a by-product of training, and secondly, the maintenance of a flexible capability to accomplish the diversified "in-plant" work as well as the fulfilment of "off-depot" workloads arising from the needs of other Service formations.

FUNCTION

- 4 In order to implement the above approved role, the Repair Depot will perform the following functions in accordance with RCAF current policies and directives.
- (a) Repair, reconditioning, conversion and modification of technical equipment, within the limits of their provided resources and as approved by AMCHQ.

- (b) Overhaul of components and accessories.
- (c) Salvage of aircraft and reclamation of parts.
- (d) Storage of aircraft, aero-engines and mobile equipment.
- (e) Provision of a pool of immediate reserve aircraft modified to an approved standard by AMCHQ.
- (f) Acceptance and ferry of aircraft as directed by AMCHQ.
- (g) Flight test of aircraft after repair, modification conversion or storage except where performance investigation is involved.
- (h) Field inspection and third line maintenance of special equipment such as link trainers, GCA and crypto.
- (j) Provision of mobile support for first and second line maintenance overcome critical situation at operating units as they occur.
- (k) Special technical projects such as:-
- (1) Develop and prototype modifications on aircraft ME and ground support equipment.
- (2) Fabrication of nonavailable parts.
- (3) Grinding and manufacture of telecom crystals.
- (4) Evaluation of new equipment as directed by AMCHQ; and
- (5) Conversion of aircraft.

ORGANIZATION

- The organization of a service-manned Repair Depot must be sufficiently flexible to manage the diversified programmes it is called upon to do.
- 6 Appendices "A" and "B" to this Order outline the organization to be followed in

Repair Depot operation. Basically the organization allows for:-

- (a) A component under the Senior Accounts Officer, responsible to the Commanding Officer for pay and supply accounting, Messes and Institutes and end product cost, accounting as required.
- (b) A component under the Chief Administrative Officer, responsible to the Commanding Officer for personnel administration and other related services.
- (c) A component under the Chief Technical Officer, responsible to the Commanding Officer for all technical production and other related functions.
- (d) A component under the Senior Supply Officer, responsible to the Commanding Officer for stock control, receipts and issues, warehousing and the movement of major equipment to and from the Repair Depot to meet RCAF requirements.

DUTIES AND RESPONSIBILITIES

7 The duties and responsibilities of those personnel forming the component headed by the CTechO are as follows:-

CHIEF TECHNICAL OFFICER (CTechO)

(a) The CTechO is responsible to the Commanding Officer for Depot technical policy, overall administration and direction of its technical resources.

PRODUCTION CONTROL OFFICER (PCO)

- (b) The PCO and his staff plan, authorize and schedule the accomplishment of all workloads assigned to the Repair Depot. The PCO is directly responsible to the Chief Technical Officer and will ensure that:-
- (1) Efficient planning and provisioning action of spares and materials is effected for allotted projects.
- (2) There is a liaison with industrial engineering on the establishment of labour standards and units of production count.

- (3) Scheduling of workloads to the work centres is accomplished.
- (4) Control is maintained to ensure timely distribution of material and spares to meet scheduled workloads.
- (5) Statistical data on production is compiled and maintained in conjunction with the Plans and programme Officer.
- (6) He acts as a member of a Depot planning team which determines the Depot capability to accept projects and the adequacy of the Program in fulfilling the role of the Depot.
- (7) He initiates documents authorizing the expenditures of labour and materials and will be the liaison with SOAE/RD on workloads and the submission of information required by AMCHQ.

OFFICER COMMANDING ELECTRONIC SHOPS (OC ELECT)

- (c) The OC Elect administers and controls all Depot Production and Support Shops of an electronic nature. The OC Elect is directly responsible to the Chief Technical Officer and will ensure that:-
- (1) Efficient control of work centres is maintained.
- (2) Actual production in the work centres is effectively monitored.
- (3) The work centres are staffed with the proper skills in the required quantities to accomplish assigned workloads.
- (4) The Depot responsibility for advanced technical and managerial training is accomplished by the implementation of a system of job rotation in accordance with current policies.
- (5) Control of procedures is established for communication between shops and Off-Depot formations and organizations.
- (6) He acts as a member of a Depot planning team which determines the Depot capability to accept projects and the adequacy of the programme to fulfill the Depot role.

OFFICER COMMANDING MECHANICAL SHOPS (OC MECH)

(d) The OC Mech administers and controls all Depot Production and Support Shops of a mechanical nature. He is responsible directly to the Chief Technical Officer for duties and responsibilities as listed for the OC Elect as they apply to the Mechanical Shops.

QUALITY CONTROL OFFICER (QCO)

- (e) The QCO at a Repair Depot formulates and executes Quality Control procedures in accordance with established RCAF policies. He correlates the inspection with the production function to secure economical use of facilities and materials, prevents delays and ensures an orderly flow of work and improved standard of workmanship. The QCO is directly responsible to the Chief Technical Officer and will ensure that:-
- (1) Processes of repair, overhaul or manufacture are carried out using approved methods and good general shop practices.
- (2) Proper liaison with the engineering group in the development of process specifications and the control of special processes.
- (3) The Quality Control staff is efficiently directed in the preparation of inspection standards and objective quality standards.
- (4) Technical guidance, supervised direction and training is provided for inspection personnel.
- (5) The most effective periodicity of each project or work programme, or amendments thereto, is effected by the utilization of Statistical Quality Control techniques.
- (6) Materials used on projects are in accordance with specifications and drawings.
- (7) Storage of materials and parts is conducted in accordance with approved RCAF methods.
- (8) All necessary publications, technical data and inspection equipments are available to the QC staff.
- (9) He acts as a member of a Depot

planning team which determines the Depot capability to accept projects and the adequacy of the programme to fulfill the Depot role.

(10) He reports to the Chief Technical Officer all recurring samples of poor work-manship which result in loss of manhours and materials.

ENGINEERING SERVICES OFFICER (ESO)

- (f) The ESO co-ordinates, directs and ensures the efficient operation of the Engineering Department, Drawing Office, Photographic Services Section, and the Central Technical Library. The ESO is directly responsible to the Chief Technical Officer and will ensure that:
- (1) Methods improvement and labour standards are determined using recognized techniques such as Methods-Time Measurement.
- (2) Product engineering and problem analysis is established for all Depot shops.
- (3) Preparation and supply of all technical and special project drawings are effected.
- (4) All functions concerning EO specifications and related technical data are efficiently administered.
- (5) Photographic Services are operated and administered efficiently.
- (6) He acts as a member of a Depot planning team which determines Depot adequacy and capability to accept projects.

PLANS AND PROGRAMMES OFFICER (P&PO)

- (g) The P&PO co-ordinates evaluation and acceptance studies of long term work programme proposals, and renders specialist assistance and advice on Management Control Procedures. Responsible directly to the Chief Technical Officer, the P&PO will ensure that:
- (1) Statistical data on material consumption and labour usage is developed and maintained.

- (2) The development of future long range work programmes for the Depot are co-ordinated.
- (3) Performance analyses and other MEMS reports are prepared for managerial action.
- (4) Effective assistance and advice is provided as required on the implementation and operation of the Maintenance Engineering Management System.
- (5) He co-ordinates the activities of the Depot planning team which determines the Depot capability to accept projects and the adequacy of the programme to fulfill the Depot role.

STORAGE MAINTENANCE CONTROL OFFICER (SMCO)

- (h) The SMCO directs and controls all technical aspects of storage maintenance activities associated with airframes, aeroengines, and related aircraft equipment. Responsible directly to the Chief Technical Officer, the SMCO will ensure that:-
- (1) All equipment being processed into storage is handled in accordance with the appropriate -9 Group of Engineering Orders.
- (2) Proper maintenance is effected on all equipment while in storage.
- (3) Equipment is efficiently removed from storage as directed by AMCHQ.
- (4) Adequate supply facilities are maintained by the storage group.
- (5) Ground handling equipment is efficiently maintained.
- (6) Reports and returns required by AMCHQ are effectively processed and passed.

WORK CENTRE OFFICERS (WCOs)

- (j) The WCOs heading the various work centres within their jurisdiction will be responsible directly to the OCs Elect or Mech respectively. They will ensure that:
- (1) All work assigned to their shops is

- carried out efficiently and in accordance with existing orders and policies.
- (2) Compilation of records and reports required by the management team is efficiently maintained.
- (3) Recommendations for additional equipment necessary for the efficient operation of their shops are submitted to their respective Officer Commanding.
- (4) Effective administration of personnel, equipment, and work procedures under their jurisdiction is maintained.

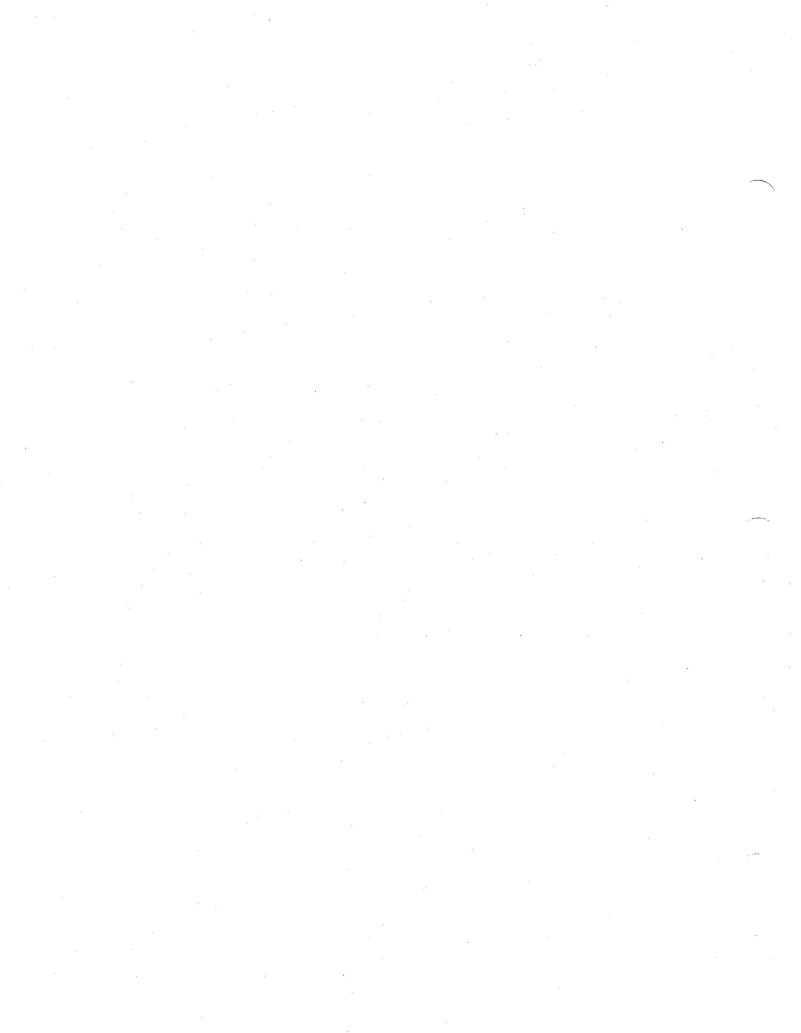
MANAGEMENT CONTROL

- 8 It is mandatory that management at a Repair Depot and higher service formations have specific performance indices if they are to determine how well the RD is accomplishing its assigned role. Indices used at Repair Depots should be based upon two fundamental concepts:-
- (a) Maximum pre-planning of the workload programme.
- (b) Management by exception: that is to say, concentration of remedial action upon problem areas.
- To achieve successful volume training at all technical levels a long range workload proposal programme is provided by AMCHQ. This will allow the Repair Depot to analyse and assess those projects within RD capability and select those most desirable in the achievement of the training role. Only in this way will the Repair Depot be in a position to determine in detail the optimum utilization of current resources.
- 10 Upon receipt of long range work proposals, the Depot planning team, comprised of the senior officers from Production Control, Industrial Engineering, Quality Control, Supply, and Programmes and Performance Analysis, is convened. This group determines if the proposed programme, or parts thereof, contains the desired training potential. If the proposal meets this requirement, the planning team then determines the specific para-

meters within which a feasibility study will be conducted.

- 11 This study, under the direction of the Production Control Officer, determines the most effective method of project accomplishment. Shop tooling requirements, trade capability training, engineering progress standards, supply provisioning and direct labour standards are laid down in detail at this time.
- 12 The Depot planning team is then reconvened to effect approval of the programme upon the basis of the completed feasibility study. Accepted proposals are then forwarded to AMCHQ along with support requisites such as lead times, shop equipment supportability, provisioning, and other pertinent requirements.
- 13 After final approval by AMCHQ and subsequent work authorization by the Production Control Officer, the complete work package is forwarded to the Shop Scheduler who is responsible for its release into actual production according to the instructions detailed in the feasibility study.
- 14 Workload pre-planning provides the Repair Depot with standards upon which performance can be evaluated. To carry out this evaluation, however, a further step is necessary. Actual production statistics must be collected and compared with the predetermined standards established in the feasibility study. Significant variances in production statistics that fall outside of the acceptable tolerance limits thus become problem areas. Effective reporting techniques highlight the significant variances so that prompt corrective action may be taken.
- 15 Achievement of "management by excep-

- tion" requires an integrated system of data collection and timely analysis in the application of the three categories of resources at the Depot's disposal:
- (a) Labour The accounting group is responsible for the compilation of labour utilization reports based on a system of complete hour accountability in each production shop.
- (b) Material Material comsumption standards are developed through the collection of basic data in each production shop. This data build-up is facilitated by the existence of a sub-store group in each work area. The value of this information is twofold:-
- (1) It allows management to analyse actual consumption.
- (2) It provides the main stores group with statistical provisioning information.
- (c) Overhead Provision is made in the labour accounting system to segregate direct and indirect labour thereby giving management a measure of control over a major indirect expense.
- 16 The management procedures outlined above pertain to related rather than several separage organizations and functions. Complete teamwork within the technical organization and all supporting components is an indispensable requirement for the effective management of Repair Depot resources to meet assigned role.
- 17 The duties and responsibilities of the related components within the 6 Repair Depot organization as noted in paragraph 6 of this EO will be published in the relevant governing document for that Branch.



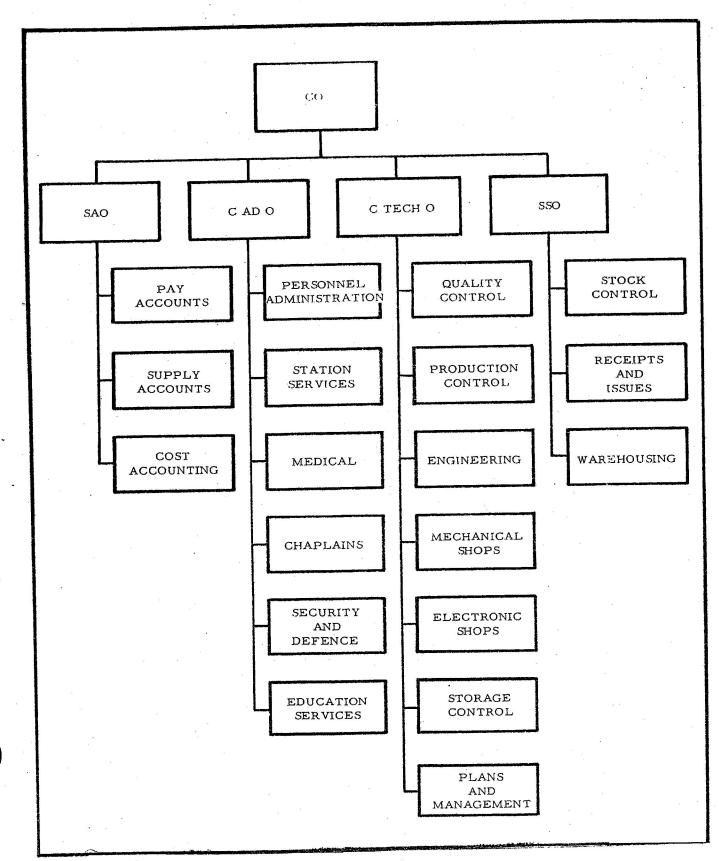


Figure A-1

