

CLEARANCE OF AIRBORNE STORES

DIRECTORATE GENERAL OF AERONAUTICAL QUALITY ASSURANCE **MINISTRY OF DEFENCE, GOVERNMENT OF INDIA**

INTRODUCTION:

DGAQA is the regulatory authority of the Ministry of Defence, Govt. of India, for Quality Assurance and final acceptance of Military Aircrafts/Aero Engines/Air Armament/Unmanned Aerial Vehicle/Aero Equipments, Radar and telecommunication, Ground Support Equipment, Fuel Oil Lubricants and Flying clothing during design/development/production/overhaul/repair/modification pertaining to Indian Defence Services. DGAQA also plays an important role in providing technical consultation to Ministry of Defence, Service HQrs, Defence Public Sector undertakings (DPSUs) and manufacture of defence Aero Stores. DGAQA also participates during acquisition of Airborne Stores and is QA regulatory agency as per DPP 2013 and DPM 2009.

DGAQA follows a supervisory Quality Assurance System i.e. Approval of a firm and its Quality Management System (AFQMS) for effective monitoring of Quality Control and final acceptance/clearance in respect of Military Airborne Stores. Details of the AFQMS are available under www.dgaeroqa.nic.in (Heading –Technical, sub Heading – Role and Functions). The role and responsibility of DGAQA during design/development/production/overhaul of Airborne Stores is explained in document viz DDPMAS – 2002 (Design, Development & Production of Military Airborne Stores – 2002).

CLEARANCE FOR AIRBORNE STORES:

In the process of development & production of Military Airborne Stores, various organizations of MoD have distinct responsibilities. Department of Defence Production and supplies (DDP), DGAQA, CEMILAC (Center for Military Airworthiness & Certification), DRDO Labs, Service Head Quarters are some of them. The MoD looks after the planning aspects while DGAQA is responsible for the QA aspects and CEMILAC is the certification Authority and Design Authority for these stores.

Most of the projects are initiated on specific requirements of the user services and are based on ASQR/GSQR/NSQR/ISQR as a qualitative requirement. DGAQA associates in the projects where DGAQA has been designated as QA agency for the final acceptance/clearance of stores.

Involvement of the DGAQA starts right from the vetting of SQR, RFP stage and during the CNC stage. DGAQA associates with the QA during Design and Development and manufacture/ROH of programs/projects and contributes towards the objective of Quality of Design and its verification/validation.

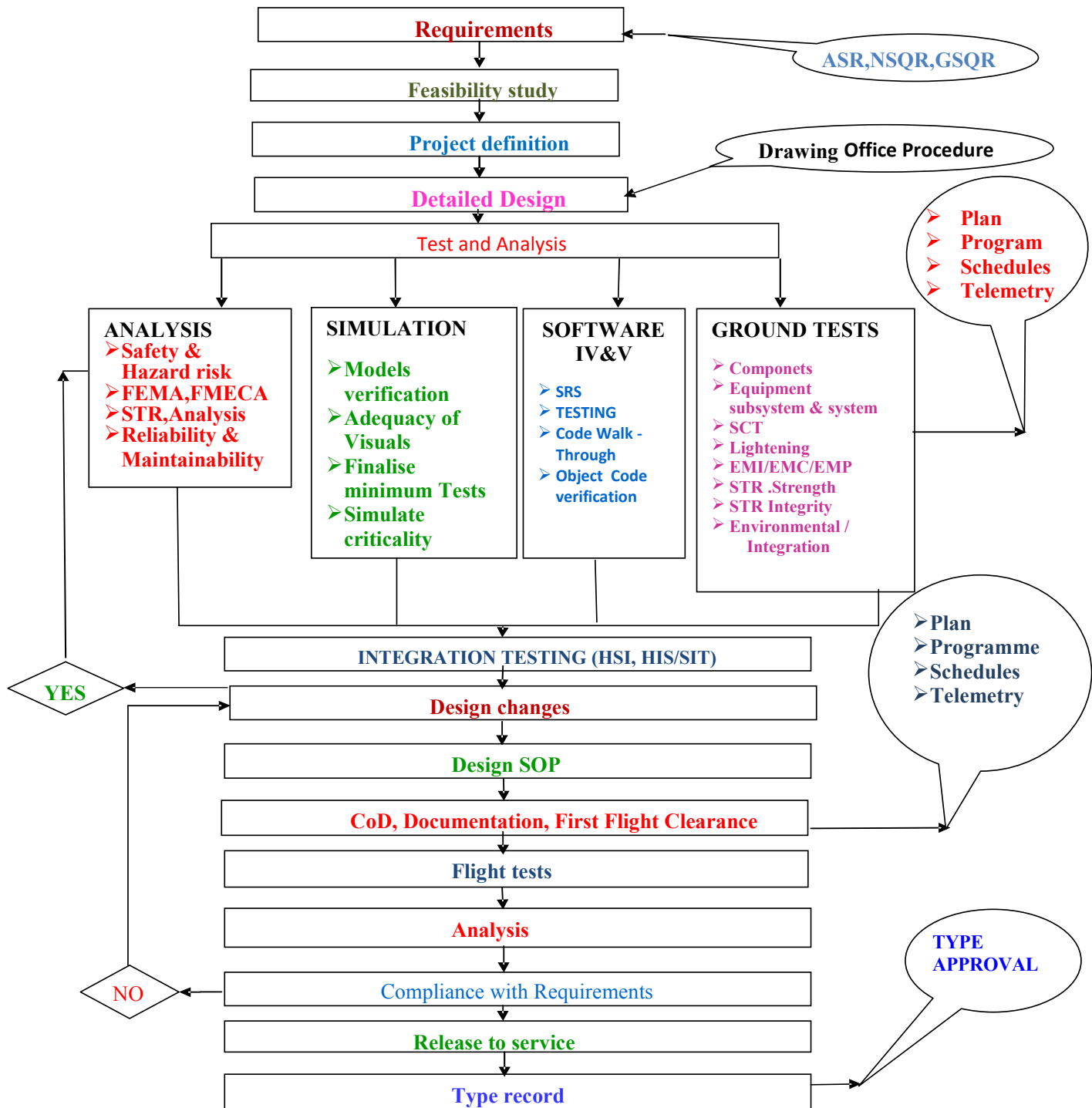
The procedure for design and development of Aeronautical Stores and the role of different agencies has been defined in DDPMAS, outlining the following stages:

- a) Project Definition
- b) Preliminary Design
- c) Detail Design
- d) Technical/Design Review
- e) Test and Analysis (including various analysis, simulation, software verification and validation and Ground Test)
- f) Integration Testing
- g) Design SOP
- h) Certificate Of Design(COD)/Documentation
- i) First Flight Clearance
- j) Flight Tests and Analysis
- k) Type Record and Type Approval

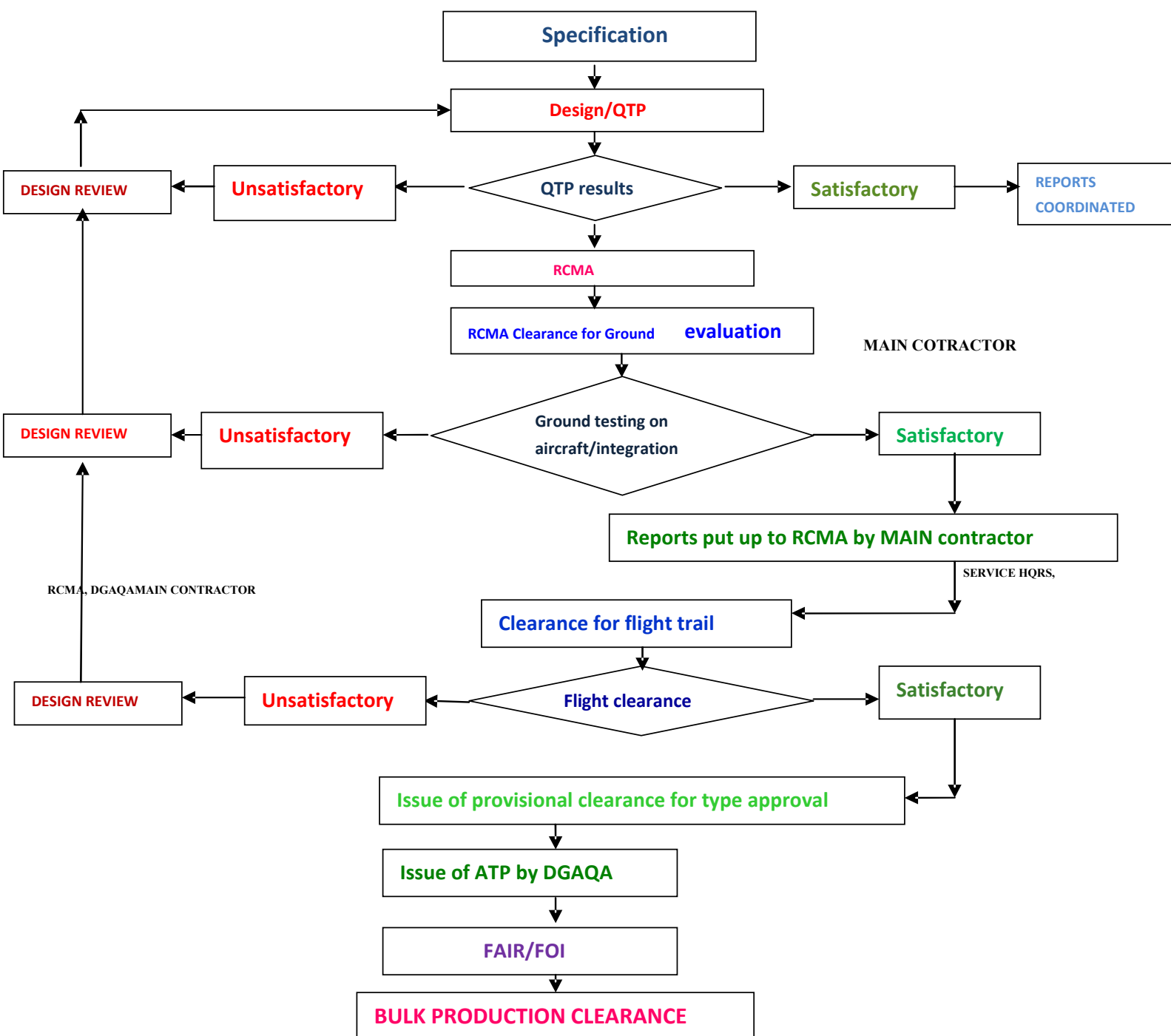
An indicative flow chart for Airworthiness Certification of Military Aircraft and Airborne Systems is placed at Annexure – I. For certification of LRUs, a flow chart is placed at Annexure – II. A similar flow chart for certification of indigenous flying clothing and protective equipments is placed at Annexure – III. For Ground equipments/Test equipments for Airborne Stores, Guidelines are available on **DGAQA website** -www.dgaeroqa.nic.in under the homepage and menu Test certificate and certification procedure.

To follow up with Flight Tests and related co-ordination, following Offices may be contacted:

1. ADG, HQ, DGAQA
H Block, Min of Defence, New Delhi – 110011
Tel: 011-23017362 Fax: 011-23014914 email: adg.dgaqa@gov.in
2. DDG (South Zone)
C/O HAL (BC), Vimanapura Post, PB No. 1782
Bangalore 560017
Tel: 080-25227515 Fax: 080-25227904 email: ddgsz.dgaqa@nic.in
3. DDG (N&C Zone)
DGAQA, Min of Defence, Post: HAL Lucknow, Lucknow 226016
Tel: 0522-2351207 Fax: 0522-2351208 email: ddgncz.dgaqa@nic.in
4. DDG (Nashik)
DGAQA, Min of Defence, C/O HAL (Nashik Division), Ojhar – 422207
Tel: 02550-0275364 Fax: 02550-275364 email: ocrink.dgaqa@nic.in
5. DDG (Koraput)
DGAQA, Min of Defence, PB No. 06, Sunabeda – 763002
Tel: 068530-222119 Fax: 06853 – 220309 email: ocrikpt.dgaqa@nic.in

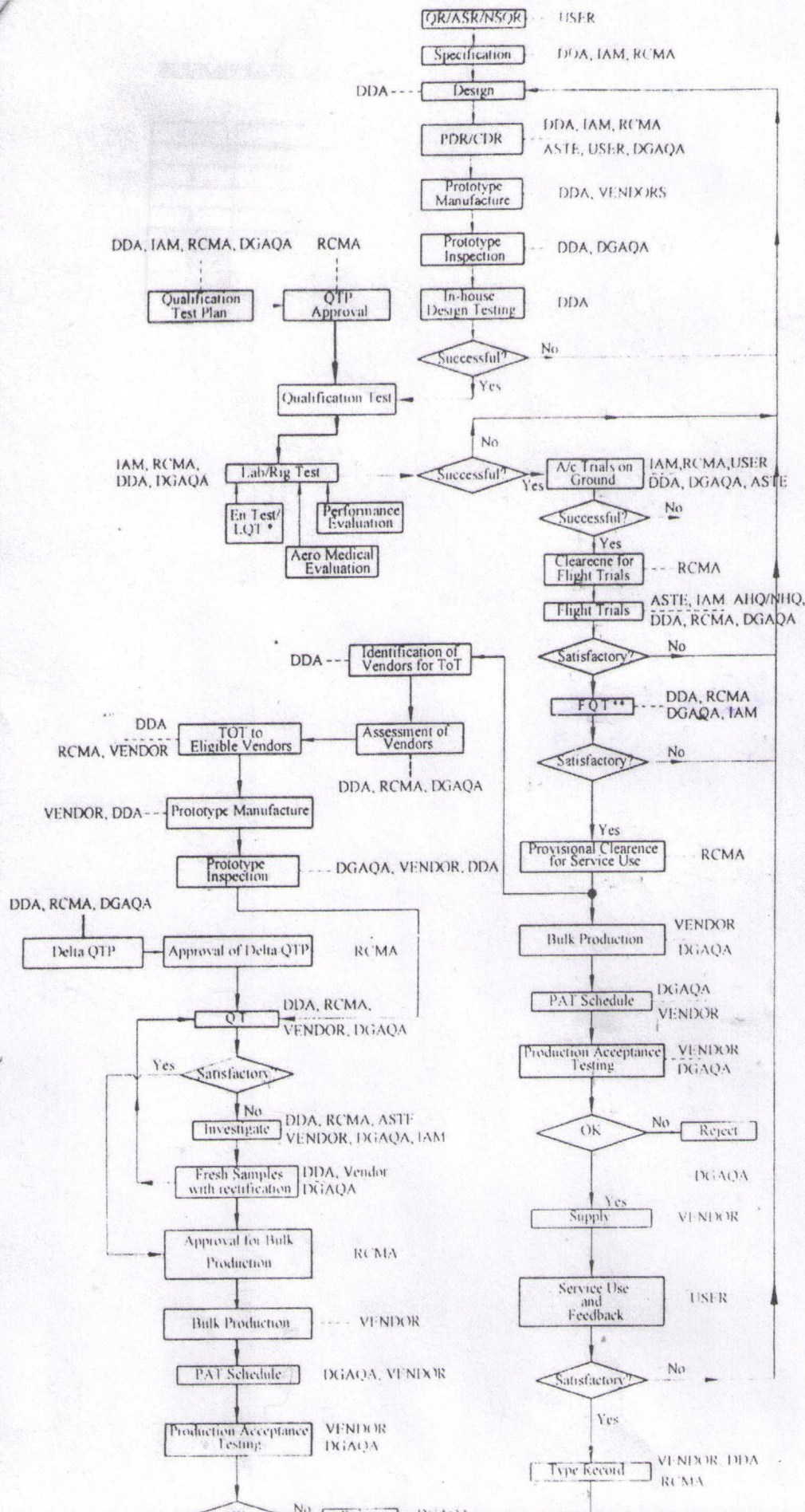
AIRWORTHINESS CERTIFICATION OF MILITARY AND AIRBORNE SYSTEMS

CERTIFICATION OF LRU /ROTABLES OF AIRCRAFT



ROUTE TO CERTIFICATION FOR INDIGENOUS FLYING CLOTHING AND PROTECTIVE EQUIPMENT

Appendix 7
ANNEX - III



LEGEND:
 OR Operational Requirements
 ASR Air Staff Requirements
 NSOR Naval Staff Qualitative Requirements
 QTP Qualification Test Plan
 FOT Full Qualification Test
 LQT Limited Qualification Test
 PAT Production Acceptance Test
 PDR Preliminary Design Review
 CDR Critical Design Review
 DDA Design & Development Agency
 RCMA Regional Centre for Military Airworthiness