

NOTES FOR GUIDANCE FOR REGISTRATION AS A PROFESSIONAL PHOTOGRAMMETRIC SURVEYOR

1. INTRODUCTION

These notes which have been approved by the South African Council for Professional and Technical Surveyors, have been compiled with a view to assisting candidates who intend qualifying for registration as Professional Photogrammetric Surveyors in terms of the Professional and Technical Surveyor's Act, 40/1984. Adherence to the requirements as set out below, will assist materially in avoiding unnecessary delays.

DEFINITION

The "Council" means the South African Council of Professional and Technical Surveyors established in terms of Act 40 of 1984, or such agent acting on its behalf.

2. STATUTORY REQUIREMENTS

- 2.1 A candidate who wishes to register as a Professional Photogrammetric Surveyor must normally first register in terms of Section 21 of the Act as a Professional Photogrammetric Surveyor in Training and after completing the prescribed training may apply for registration as a Professional Photogrammetric Surveyor if he or she has complied with the requirements of Section 20(1)(a)(c)(e) and (f) of the Act.
- 2.2 A candidate who wishes to qualify for registration as a Professional Photogrammetric Surveyor and who has, prior to the commencement of the Act, undergone training in the form of practical experience contemplated in Paragraphs 3 and 4 must submit an application to the Council in terms of Paragraph 5. Where it is not possible to obtain certificates of employment or submit exact schedules of training and experience an affidavit detailing all such training and experience, may be acceptable.

3. DURATION AND NATURE OF TRAINING

3.1 Period of Training

- 3.1.1 The period of practical training required in terms of Section 20(1)(d) is 270 working days and the nature of such training shall be as set out in Paragraph 3.2 and is controlled by the Council. A training certificate is required.

3.2 Nature of Training

3.2.1 Training must be varied and can include cadastral, engineering, topographical, control surveys, and photogrammetric surveys. The work must be undertaken under the personal supervision of a professional photogrammetric surveyor or photogrammetric surveyor registered in terms of the Act, or such other person whom the Council considers suitable.

3.2.2 Compulsory Training

120 working days which comprises:

	TYPE OF SURVEY	WORKING DAYS
i	POSITION FIXING : This includes horizontal and vertical fixing using different techniques and instrumentation and shall include GPS fixing in three dimensions.	20
ii	PHOTOGRAMMETRIC COMPILATION : This includes setting up of Stereo models, observing line and area features, verification and editing, plus DTMs and contouring. The work should be from more than one photo scale.	15
iii	AERIAL TRIANGULATION AND ADJUSTMENT : This includes tie point selection and observations. Emphasis must be placed on the analysis of results.	15
iv	GEOMATICS : This should include spatial data management and specifically the presentation of data to GIS systems.	30
v	PHOTOGRAMMETRIC JOB PLANNING : This includes : choice of photo scale, accuracy specifications, digital line and orthophoto alternatives, determination of supplies and setting up of GIS structures.	20
vi	PHOTOGRAMMETRIC FIELD WORK : Annotation; Design and identification of photo control, field checks.	20
TOTAL		120

3.2.3 Additional Training

Not less than 150 working days in the following types of survey of which not **less** than 10 days or **more** than 100 days will be acceptable in a minimum of five of the following options:

3.2.3.1 Orthophoto Production

3.2.3.2 Cadastral Survey by Photogrammetric Methods

3.2.3.3 Photogrammetric Measurements of Structures and Buildings

3.2.3.4 Cartographic Map Production

3.2.3.5 Project Management

3.2.3.6 Aerial Survey Cameras and Darkrooms

3.2.3.7 Soft Copy Photogrammetry

3.2.5 A detailed day to day diary of all survey work undertaken during the training period shall be kept and may be called for by the Council.

4. STANDARD OF TRAINING

- 4.1 The work undertaken for Photogrammetric compilation and Geomatics should include the cleaning up of data for input to a GIS, polygonising, patterning and preparing sheet surrounds for plotting on a CAD system plus attaching attribute data to the polygons, data structuring and classification and data formatting.
- 4.2 In all the required work categories, the work must not be one sided and must include a variety of work within that category.

5. TRAINING AND/OR EXPERIENCE SCHEDULE

When applying to the Council for registration, the candidate shall supply a Training and/or Experience Schedule as an extract from the diary and prepared in the form of the **attached** specimen. This schedule must be compiled in chronological order and each page must be signed by the supervisor or mentor, with whom the candidate has trained, and the candidate.

6. LAW EXAMINATION FOR PROFESSIONAL SURVEYORS

- 6.1 A person wishing to register as a Professional Photogrammetric Surveyor must apply to the Registrar to write a Law Examination.
- 6.2 Law examinations can be written in most centres at least twice a year. Candidates will be notified of the time and venue for each examination accordingly.
- 6.3 The candidate will be expected to have a comprehensive knowledge of the laws relating to registration of surveyors and the survey and registration of land. He or she should also be acquainted with certain aspects of related legislation as set out in the details below.
- 6.4 The law examination consists of a written paper of 3 hours duration. The examination is "open book" and the pass mark is 65%.

The paper will consist of questions on the following Acts :-

The Professional and Technical Surveyors Act (40 of 1984) and Rules
The Land Survey Act (9 of 1927)
Any other Act that may be prescribed from time to time.

- 6.5 The Registrar will notify the candidate of a pass or failure.

7. APPLICATION FOR A PRACTICAL TEST

- 7.1 When the candidate is of opinion that he or she has met the requirements set out in Paragraph 3 and 4, he or she should apply to the Council for registration in the relevant category.
- 7.2 The application must be accompanied by:
- a) An Application form and the relevant fee,
 - b) The Schedule of Training and/or Experience referred to in Paragraph 5,
 - c) A certified copy of his or her degree, and
 - d) Certificates of Employment as prescribed in the Rules. A separate Certificate of Employment is required in respect of each supervisor with whom the candidate has served.
- "Certified" means certified to be a true copy by a Commissioner of Oaths or a Justice of the Peace.
- 7.3 The Convenor of the Professional Photogrammetric Surveyors Registration Committees will advise the candidate of the date and time for an interview. Immediately after the interview the candidate will be advised whether a practical test will be required.

8. DETAILS OF A PRACTICAL TEST.

- 8.1 The Practical Test consists of the completion of a task or tasks to the satisfaction of the Convenor of the Professional Photogrammetric Surveyors Registration Committees. A detailed requirement to this effect will be drawn up and provided to each practical test candidate on an individual basis arising from the findings from the interview.
- 8.2 Any specific project undertaken by the candidate during his period of training in the form of practical experience which might demonstrate his ability to perform some of the tasks set out in item 2.3.6 of the *General Information and Procedure* notes, may be submitted to the Convenor of the Professional Photogrammetric Surveyors Registration Committee for a decision as to whether it would be accepted as part of the Practical Test.

9. COMPLETION OF REGISTRATION PROCEDURE

- 9.1 Evaluation of the Practical Test will take place as soon as possible after completion of the work. The candidate will be informed of the time, date and place of a second interview, if required. The Convenor of the Professional Photogrammetric Surveyors Registration Committees will then issue a Practical Test certificate and forward his decision to the Council in regard to the acceptance, or otherwise, of the application.
- 9.2 The Registrar will notify the candidate that he or she complies with the requirements of Section 20(1)(b), (c), (d) and (e) of Act No. 40 for 1984 and will request him or her to make (in terms of Section 20(1)(f) of the Act) an oath or affirmation in relation to his or her calling. The relevant registration fees will also be required.
- 9.3 When these formalities have been completed the candidate will be registered with the Council as a Professional Photogrammetric Surveyor.