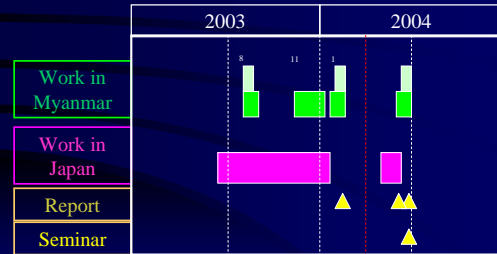


Slides 5: Progress Report 3

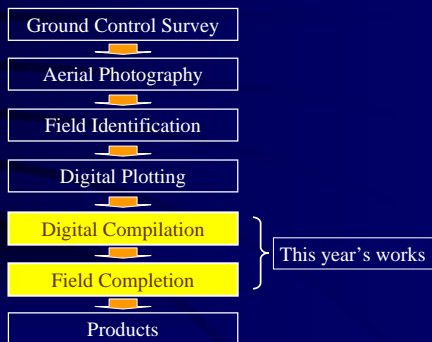
Progress Report 3 in the third year study

February 10, 2004
Asia Air Survey Co. Ltd.
Junichi KOSEKI

Time Schedule of the Study

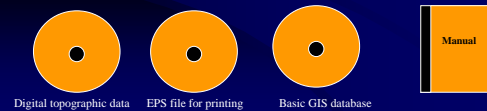


Work Flow of Map Making



Digital Compilation

- To prepare Digital Topographic Data
- To prepare EPS file for Printing Films
- To prepare Basic GIS Database
- To prepare Survey manual



Given Data and Materials

- Initial Topographic Data File
- Technical Specifications with map symbols and application rules Ver.4.0 Ver.5.0
- Table of acquired topographic feature code
- Standard keys for photo interpretation
- Materials collected in this study

Instrument for compilation

3 sets of Digital plotter and 4 sets of Digital Compilation System were introduced to implement digital compilation.

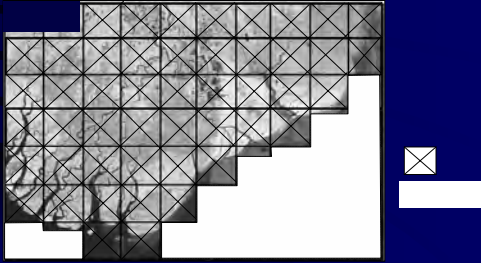


Summit Evolution
AutoCAD Map

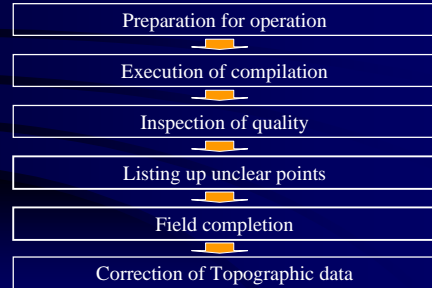


TNTmips

48 Sheets should be compiled

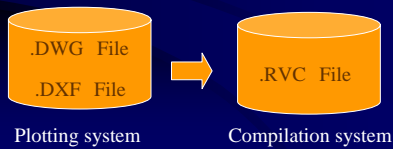


Work Steps in Digital Compilation

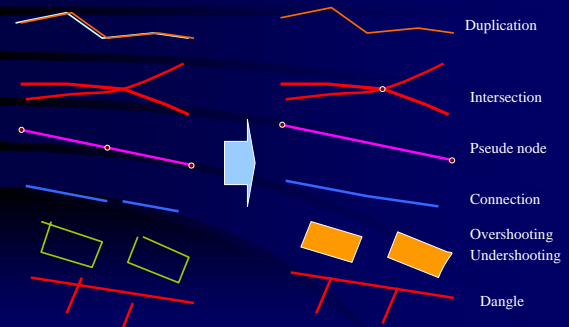


Preparation for compilation

- Import digital topographic data which were prepared digital plotting and to stored by AutoCAD(.dwg) formatted file
- Confirm to be imported all plotted data



Data Cleaning



Execution of compilation

- Delete unnecessary features
- Add missing features
- Generate polygon from lines
- Compile contour line
- Check spelling and location of Annotation
- Consistency between adjacent maps
- Eliminate Military facilities

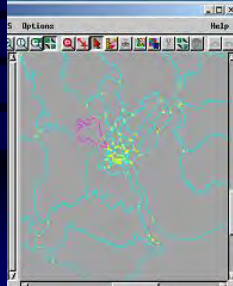
Check of Place names

NO	NAME	TYPE	CLASS	STATUS	DATE	USER
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
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21
22
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27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48

Spelling and location were checked

Topological check

Administrative boundaries were checked topologically

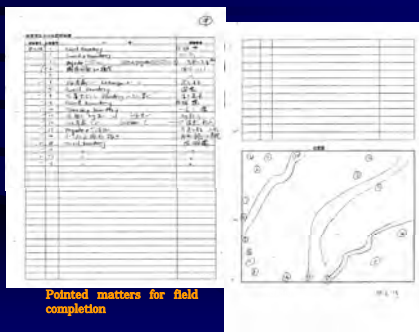


Topological check has done

Preparation of Drawing file (Map symbolization)

- Draw topographic map from topographic data applied by defined map symbols
- Displacement of piled up symbols
- Layout of location of annotations
- Add marginal information

Listing up of unclear points



Pointed matters for field completion

Field Completion

To confirm unclear points arisen in the field survey



Supplementary compilation

To complete Digital Topographic Dataset

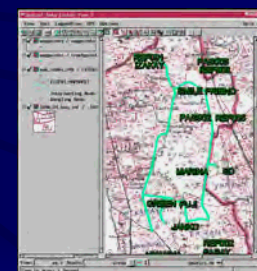
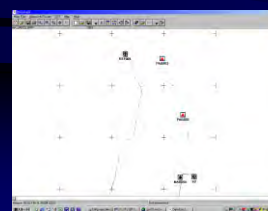


Digital compilation

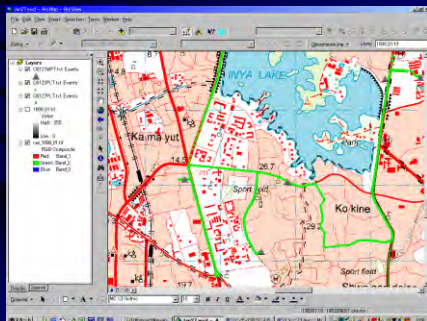


Inspection of quality

Addition of new feature using GPS



Application for Navigation



Preparation of marginal information edition

- Design of marginal information based on UTM project
- Add the JICA's sentence and JICA logo

This map was prepared jointly by Japan International Cooperation Agency (JICA) and the Survey Department, Ministry of Forestry, the Union of Myanmar, under the Japanese Government Technical Cooperation Program.

Evaluation of quality

Quality of topographic data should be inspected by quantitative quality elements.

Applied ISO19100's

- Completeness
- Logical consistency
- Positional accuracy
- Temporal accuracy
- Thematic accuracy
- User defined

1. Completeness

- Commission
- Omission
- Acquired numbers of each topographic feature

2. Logical consistency

- Domain Consistency
 - Coordinates of 4 corner
 - Elevation
- Format Consistency
- Consistency between two maps
- Topological Consistency

3. Positional accuracy

- Absolute Accuracy
- Relative Accuracy
- Gridded data
- Position Accuracy



4. Temporal accuracy

- Aerial photography : March,2002
- Field Verification : December,2002
- Field Completion : January,2004

This information was recorded in marginal information and meta data

5. Thematic accuracy

- Classification Correctness
- Qualitative Attribute Correctness
- Quantitative Attribute Accuracy

Type of Error

2177 errors / 18 sheets

- Inconsistency of vegetation (17%)
- Spot height (15%)
- Inconsistency of feature code (11%)
- Water gate (11%)
- Village name (9%)
- Ommision of pond (7%)
- Built-up area or independent building (6%)
- Omission of bridge (5%)
- Missing of road (4%)
- Contour line (3%)

Quality Evaluation Report

- Making a quality evaluation report to evaluate quality of topographic data
- Making a metadata

Preparation of basic geographic database

- Unify topographic data of each sheet
- Conversion annotation to attribute of geographic feature



Reference books & GIS software

Reference books on Geodesy, Photogrammetry, GIS and GIS software were introduced for promotion of GIS



The forth year study

- Map printing
- Building of Basic GIS database
- Preparation of CD-ROM
- Preparation of Land use maps
- Seminar for technology transefer

Map Printing

- Map printing will be done in Myanmar
- Fair drwing : Map checking
- Color separation by TNTmips software



Outputting



Color separating



Printing film

Map Printing



Exposure



Developing

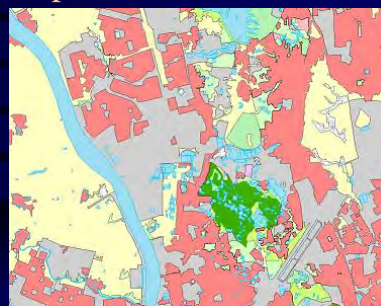


PS plate making



Printing

Preparation of Land use map



One example of thematic maps

Final products (Datasets)

- Aerial photograph image dataset
- Geodetic control point dataset
- DTM dataset
- Orthophoto image dataset
- Topographic dataset
- Symbolized map data

Final products (Document)

- Printed topographic maps
- Final Report
- Technical Specifications
with Map symbols and application rules
- Survey manual
- GIS Guideline

Thank you for listening !

