

TOURIST AERIAL PHOTOINTERPRETATION

Eng. Mihail Albotă

Institutul de Geodezie, Fotogrammetrie, Cartografie
și Organizarea Teritoriului

79662, Bd. Expoziției nr. 1 A, sector 1, București
Romania

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ABSTRACT: Aerial conventional and non-conventional photographs can reveal some tourist information to be used in tourist mapping, especially in mountainous regions, as well as, geographical characterization or the tourist potential establishment of a zone. Researches on the tourist aerial photointerpretation possibilities, and results of the four tourist book (guide) compilations for Perșani, Nemira, Măcin and especially, Ceahlău Mountains are given in this paper.

Aerial, conventional and non-conventional, photography and its rich information contents are applied in more and more various fields of activity. Although tourist zones are generally well known by an open investigation in the field, aerial and space imagery supply extra useful information, to carry out some tourist works, especially, tourist maps. Such investigations related especially to updating, identifications and locations, delimitations, hydrographical network, relief and vegetation are based on applications achieved in four mountainous zones (Perșani, Nemira, Măcin and Ceahlău Mountains) and the Danube Delta.

Based on the results obtained in actual applications, we can state that the aerial photography can be successfully used, as an auxiliary material, to compile some tourist works. Aerial image photointerpretation of some mountainous tourist zones enables to obtain useful information, in our desire to solve four problems we are especially interested in:

- (1) the basic topographical element updatings of some tourist maps (planimetry, hydrography, relief, vegetation);
- (2) thematic element identifications and locations (access roads, settlements/localities, paths, shelters, historical and architectural monuments, natural reservations, tourist elements);
- (3) physical-geographical characterization of a tourist zone (environmental location, relief and hydrography descriptions, morphological characterization, forest coverage, a.s.o.);
- (4) tourist description compilations (way, tourist elements and possibilities, a.s.o.).

We must be very well familiar with the investigated terrain, in order to derive touristic information from an aerial photography, using photointerpretation. Information in the field, information picked up from a basic topographic map and information derived from an aerial photography are closely interrelated (Figure 1), the sum of the resulted thematic information being the basic and thematic support of a thematic map.

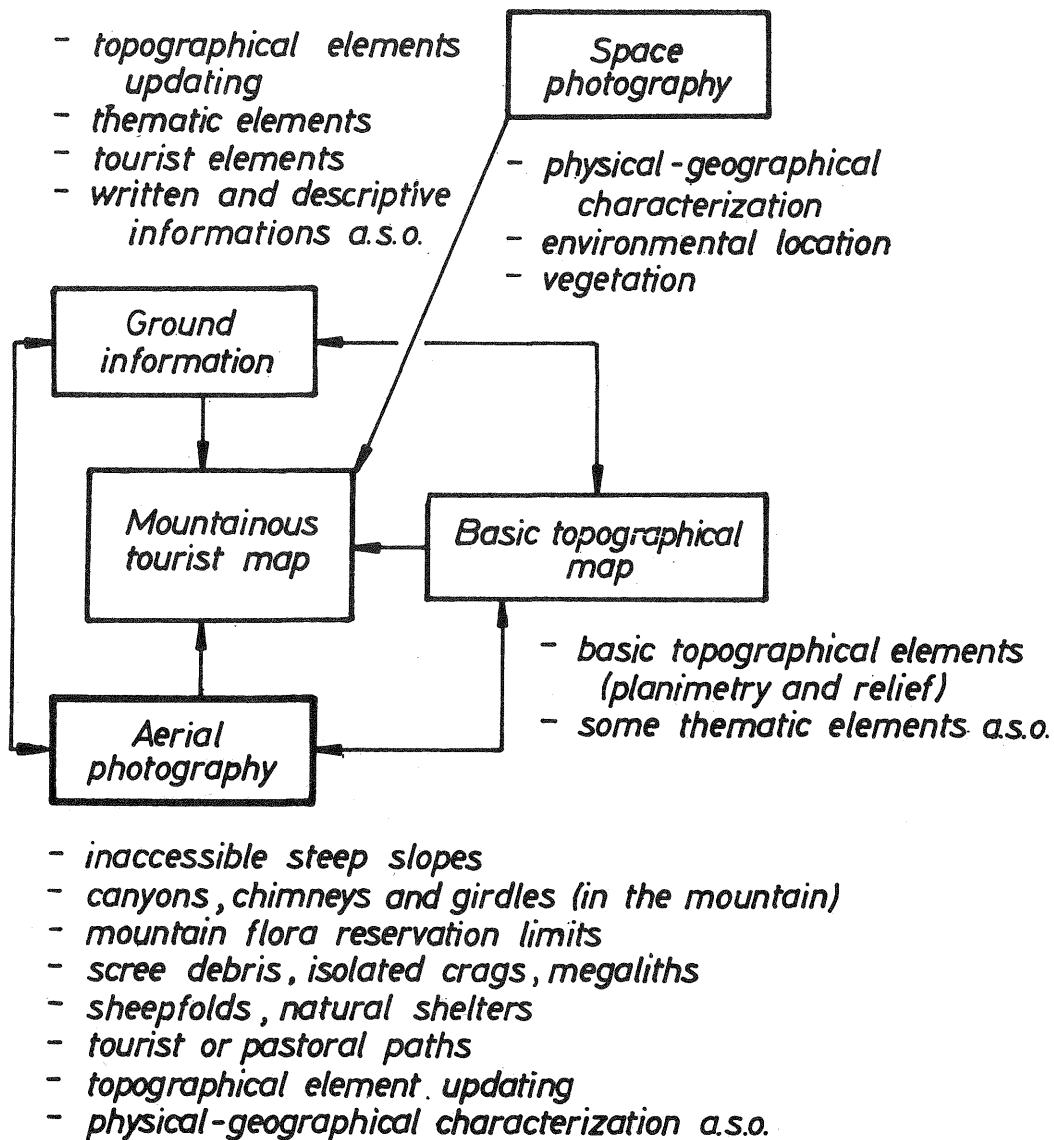


Figure 1 Ground, aerial photography and space photography relations

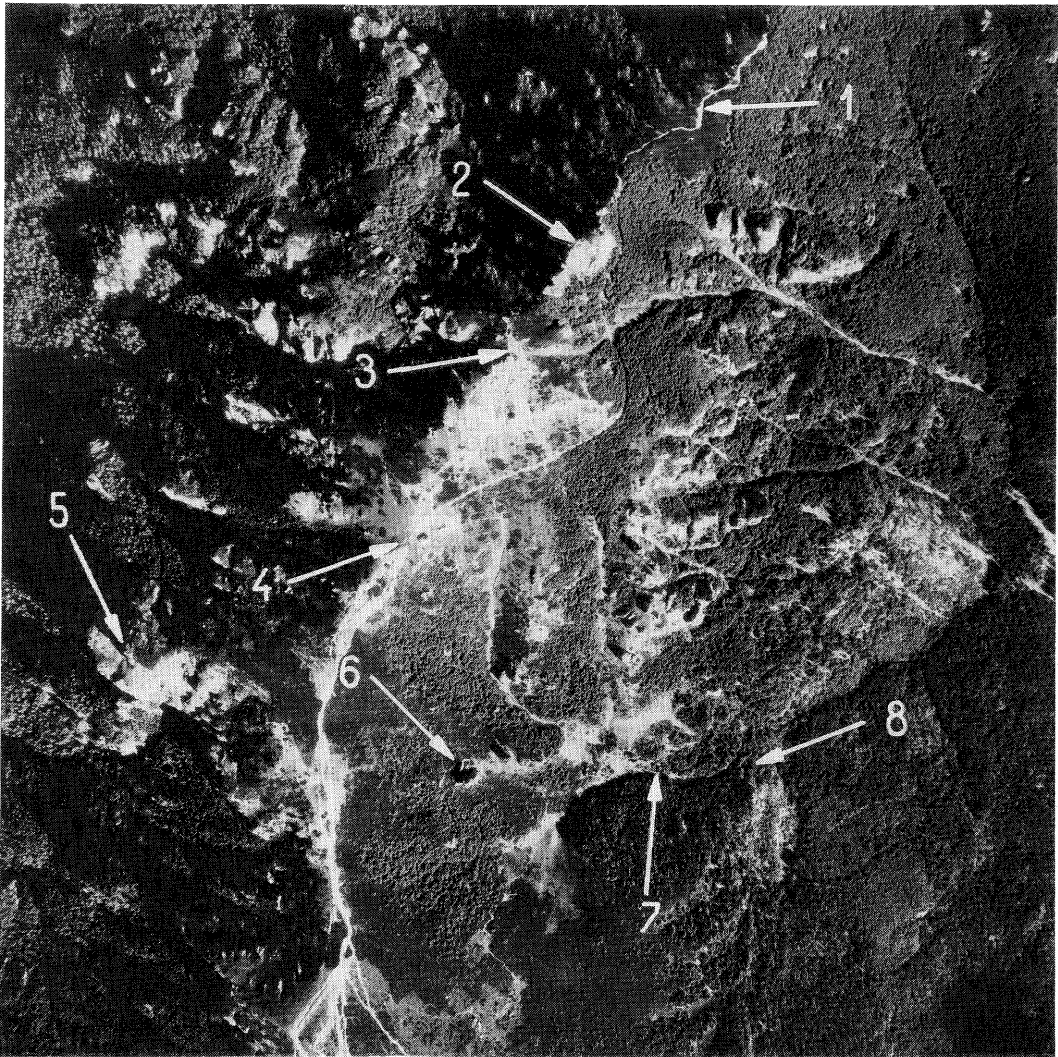
The topographic map supplies both the basic planimetric and altimetric elements and some thematic ones. Under usual circumstances, elements derived from the map are updated and the thematic ones are completed by investigation in the field.

Aerial photography investigated mono- or stereoscopically will supply thematic information on: steep slope zones, rocky walls, girdles, funnels and canons (in the mountains), scree debris, isolated rocks, megaliths, mountain flora reservation limits, some nature monuments, forest hut, sheepfolds, natural shelters, tourist and pastoral paths, a.s.o. Such thematic elements can be rigorously located as far as they are visible on the aerial photography and can be rigorously transposed on the tourist map.

Obtaining and correction of some thematic elements derived from the aerial photography using photointerpretation for the investigated mountainous zones aiming tourist purposes are an important requirement, because: (1) for the first time, three mountainous tourist guides had to be compiled for the Perșani and Nemira Mountains from the Romanian Carpathian Mountains and the Măcin Mountains and (2) a tourist guide, illustrating the rough and varied relief of the Ceahlău Mountains had to be compiled. Examples are given for the last mountainous zone in Figures 2, 3 and 4. The photographs illustrate some thematic (tourist) elements, noted from 1 to 24.

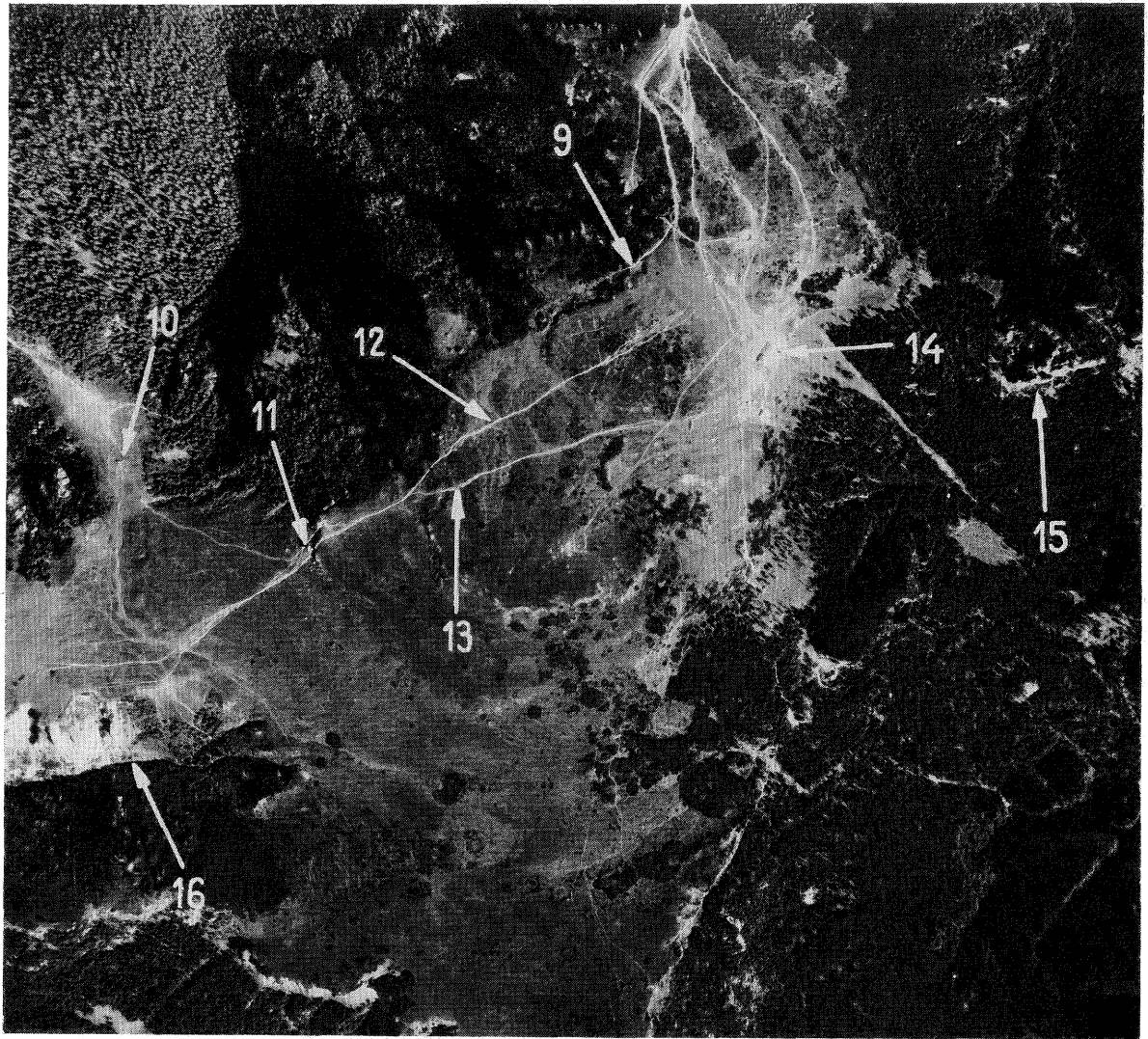
RÉSUMÉ: Les prises de vues aériennes, conventionnelles ou non-conventionnelles, peuvent dévoiler une série d'informations avec un caractère touristique qui sont utiles pour l'élaboration des cartes touristiques, spécialement les cartes des zones montagneuses et, dans le même temps, pour la caractérisation physique - géographique ou pour définir le potentiel touristique d'une zone. On mentionne les recherches effectuées concernant les possibilités de photointerprétation aérienne dans les buts touristiques, aussi bien que les résultats obtenus pour l'élaboration de quatre livres (guides) touristiques sur les montagnes Perșani, Nemira, Măcin et, particulièrement, les montagnes Ceahlău.

ZUSAMMENFASSUNG: Die Luftbilder, im sichtbaren Spektrum und in verschiedenen Spektralbändern hergestellt, können Informationen mit touristischem Charakter liefern, die für die Ausarbeitung der Touristenkarten, speziell für Gebirgsgegenden, nützlich sind und zugleich zur physisch-geographischen Charakterisierung oder zur Festlegung des touristischen Potentials eines Gebiets, beitragen. Man beschreibt die Forschungen die durchgeführt wurden um zu beweisen dass die Luftbildinterpretation für touristische Zwecke nützlich ist, so wie auch die Ergebnisse die es ermöglichten vier Bücher für die Wanderung in den Gebirgen Perșani, Nemira, Măcin und vor allem Ceahlău, zu erarbeiten.



- 1 tourist path
- 2 rocky massive (Panaghia)
- 3 peak (Vîrful Toaca)
- 4 meteo
- 5 rocky massive (Piatra Ciobanului)
- 6 megalith (Stînca lui Cobal)
- 7 canon (Jgheabul cu Hotaru)
- 8 megalith (Santinela)

Figure 2 Tourist elements located on an aerial photography (1-8)



- 9 spring (Fîntîna Rece)
- 10 sheepfolds
- 11 megalith (Piatra Lăcrămată)
- 12 pastoral path
- 13 tourist path
- 14 tourist hut (Cabana Dochia)
- 15 rocky group (Detunatele)
- 16 canon (Jgheabul lui Vodă)

Figure 3 Tourist elements located on an aerial photograph
(9-16)



- 17 inaccessible steep slope
- 18 accessible girdle (Brîna Ocolășului Mare)
- 19 peak (Vîrful Ocolășul Mare)
- 20 megalith (La Pavilion)
- 21 rock (Coloana Dorică)
- 22 forest road
- 23 rocky massive (Turnul lui Budu)
- 24 megalith (Claia lui Miron)

Figure 4 Tourist elements located on an aerial photography (17-24)