

## 45 years of the Zavod za fotogrametriju in Zagreb

On November 16 of 1961, the Executive Committee of the Parliament of the Republic of Croatia adopted the Regulation about the Organisation of Geodetic Service and decisions concerning establishment of the *Zavod za fotogrametriju* in Zagreb and the *Zavoda za izmjeru zemljišta* in Zagreb, Osijek, Rijeka and Split. It is soon going to be the 45th anniversary of the *Zavod za fotogrametriju* existing with the same name and at the same address. The *Zavod za izmjeru zemljišta* in Zagreb ceased to exist in the meantime, while the others, former *Zavod za izmjeru zemljišta* still exist and successfully operate as *Geodetski zavod*, in Osijek, Rijeka and Split.



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Nekad ...

The *Zavod za fotogrametriju* was founded as the first independent institution in Croatia qualified for photogrammetric, but also for all geodetic activities. That was the cornerstone of wider practical application of contemporary photogrammetry on the territory of Croatia, and photogrammetry – until then cherished and developed only within the frame of the Faculty of Geodesy of the University of

Zagreb – was introduced to everyday practice.

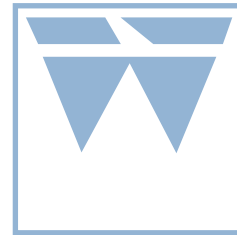
The *Zavod za fotogrametriju* started its business on January 1, 1962, with about 70 people and about 500 m<sup>2</sup> of office area and 500 m<sup>2</sup> of warehouse area and garage space, the location is Borongajska cesta 71, where the Company is still located today.

Upon establishment, the *Zavod za fotogrametriju* accepted into working relationships geodetic professionals and other staff of the *Office for Triangulation and Levelling* in Zagreb, therefore triangulation and levelling work, besides photogrammetric work, presented the most



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important part of the activities during the first period. A fully developed network of geodetic points did not exist in this territory at that time. Soon the activities of the *Zavod za fotogrametriju* expanded to include works of cadastral survey, reparceling and applied geodesy, and somewhat later expanded to the area of general and thematic cartography, as well as production of technical documentation for pres-



ervation of cultural heritage objects by methods of terrestrial photogrammetry.

In order to follow the general development trend as well as possible, the Company has always paid special attention to equipment modernisation and advancement of production processes. In the early 1970's, the Company was among the first in this area to acquire electrooptical distance meters, which greatly improved the process of field geodetic work. The first electronic computers were also acquired, and the process of automatic data processing was soon started. It was modest at first, but it has reached the threshold of contemporary automatic data processing processes, based on trained professional staff and high-quality hardware and software support.

Since its foundation, the *Zavod za fotogrametriju* has functioned on the territory of whole Croatia, always giving priority to strategic geodetic tasks for purposes of large administrative and economy systems. The Company is always present at country's surveys, as well as geodetic works for the needs of physical planning and urbanistic design, engineering design in road building and water management, and engineering in general. On several occasions, the Company executed demanding geodetic works even abroad, accompanying larger national design companies to Iran, Libya and Algeria, and recently in Bosnia and Herzegovina.

## 45 godina Zavoda za fotogrametriju u Zagrebu



16. studenoga 1961. godine Izvršno vijeće Sabora Narodne Republike Hrvatske donijelo je Uredbu o organizaciji geodetske službe i odluke o osnivanju *Zavoda za fotogrametriju* u Zagrebu, te *Zavoda za izmjeru zemljišta* u Zagrebu, Osijeku, Rijeci i Splitu. *Zavod za fotogrametriju*, tako, ovih dana navršava 45 godina postojanja pod istim imenom i na istoj adresi. *Zavod za izmjeru zemljišta* u Zagrebu se u međuvremenu ugasio, dok ostali, tadašnji *Zavodi za izmjeru zemljišta* i danas uspješno posluju kao *Geodetski zavodi*, u Osijeku, Rijeci i Splitu.

*Zavod za fotogrametriju* osnovan je kao prva samostalna ustanova u Hrvatskoj osposobljena za fotogrametrijsku, ali i za svekoliku geodetsku djelatnost. Time su položeni temelji šire praktične primjene suvremene fotogrametrije na tlu Hrvatske, te je fotogrametrija – do tada njegovana i razvijana samo u okviru *Geodetskog fakulteta Sveučilišta u Zagrebu* – uvedena u svakodnevnu praksu.

Svoje poslovanje, *Zavod za fotogrametriju* započeo je 1. siječnja 1962. godine, s oko sedamdeset ljudi i oko 500 m<sup>2</sup> uredskog, te približno isto toliko skladišnog i garažnog prostora, na lokaciji *Borongajska cesta 71*, gdje se i danas nalazi.

*Zavod za fotogrametriju* je po osnutku preuzeo u radni odnos geodetske stručnjake i ostalo osoblje *Ureda za triangulaciju i nivelman* u Zagrebu, pa su u početnom razdoblju najznačajniji dio

djelatnosti, uz fotogrametrijske radove, predstavljali upravo radovi triangulacije i nivelmana. U to vrijeme kod nas još nije postojala potpuno razvijena mreža osnovnih geodetskih točaka. Ubrzo se djelatnost *Zavoda za fotogrametriju* proširila na radove nove katastarske izmjere, komasacija i primijenjene geodezije, a nešto kasnije i na područje opće i tematske kartografije, kao i na područje izrade tehničke dokumentacije za očuvanje objekata kulturne baštine metodama terestričke fotogrametrije.

Trudeći se što bolje pratiti opći razvojni trend, *Zavod* je uvijek posvećivao znatnu pažnju modernizaciji opreme i unapređivanju proizvodnih procesa. Već

automatske obrade podataka, oslonjenih na obučeni stručni kadar i vrsnu hardversku i softversku podršku.

*Zavod za fotogrametriju* od početka djeluje na području cijele Hrvatske, uvijek dajući prednost strateškim geodetskim zadacima za potrebe velikih upravnih i gospodarskih sustava. *Zavod* je neprekidno nazočan na državnim izmjerama, kao i na geodetskim poslovima za potrebe prostornog uređenja i urbanističkog projektiranja, zatim inženjerskog projektiranja u cestogradnji i vodnom gospodarstvu, te inženjerstvu uopće. U više navrata *Zavod* je izvodio zahtjevne geodetske radove i izvan Hrvatske, prateći veće domaće



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ranih sedamdesetih godina, *Zavod* je među prvima na ovim prostorima nabavio elektrooptičke daljinomjere, čime je znatno unaprijeđen proces izvođenja terenskih geodetskih radova. Također su pribavljena prva elektronička računala, te je ubrzo zatim pokrenut proces automatske obrade podataka. U početku je to bilo skromno, da bi do današnjih dana bio dosegnut prag suvremenih procesa

projektne tvrtke u Iranu, Libiji i Alžiru, a nedavno i u Bosni i Hercegovini.

Veliki je broj geodeta – danas poznatih i uvaženih znanstvenih i prosvjetnih djelatnika ili priznatih geodetskih stručnjaka – koji su svoje prvo radno iskustvo stjecali u *Zavodu za fotogrametriju*.

Krajem osamdesetih, promjenama u zakonodavstvu, stvorene su mogućnosti

There are numerous geodesists – today famous and reputable scientists, professors or recognized geodetic professionals – who got their first working experience at the *Zavod za fotogrametriju*.

At the end of the 1980's, the changes in the law enabled ownership privatisation. The *Zavod za fotogrametriju* successfully finalized the ownership conversion procedure according to the law and was transformed into a proprietary Company with a 100% of private capital and properly registered on January 14, 1993. Shareholders – founders, a total of 98, were almost all employees, while some were former, retired employees of the Company.

In its business, the *Zavod za fotogrametriju* applies high standards in order to accomplish top quality of its products, business advancement, balanced development of the Company, as well as keep-

ing competitiveness and market position. Concerning this, the Company introduced a system of control and quality protection, and was certified according to the international quality standard ISO 9001.

Today the *Zavod za fotogrametriju* employs 75 workers, of which 85% are geodetic professionals, and about 40% of workers have high and higher professional qualification. Attention is constantly being paid to professional training and education of employees, who have access to the most contemporary geodetic, photogrammetric and information equipment and software, as well as about 15 vehicles.

The *Zavod za fotogrametriju* does business in its own business building of about 1000 m<sup>2</sup>, with its own parking lot, and associated objects, garages, workshop and warehouses.

The Company has always valued the synergy of experienced and tested professionals and new generations with knowledge of new technologies and with new views of the geodetic profession. Throughout the history of the Company, such synergy produced excellent results and guarantees to protect the quality of its products and its reputation in the future.

The new time sets new requirements and tasks before the overall economy. The *Zavod za fotogrametriju* follows new trends and progressively adapts to new business and market conditions brought by future times and the integration into the European Union. After 45 years of doing business, the *Zavod za fotogrametriju* is still in the top of Croatian geodetic economy, to the satisfaction of its users, employees, business partners and shareholders.

Robert Paj



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za privatizaciju vlasništva. *Zavod za fotogrametriju* je postupak pretvorbe vlasništva uspješno dovršio na način utvrđen zakonom, te je transformiran u dioničko društvo sa stopostotnim udjelom privatnog kapitala i propisno registriran 14. siječnja 1993. godine. Dioničari – osnivači, njih sveukupno 98, bili su gotovo svi tadašnji zaposlenici, te manji broj bivših, umirovljenih zaposlenika Zavoda.

U svom poslovanju *Zavod za fotogrametriju* primjenjuje visoke standarde radi ostvarivanja vrhunske kvalitete svojih proizvoda, unapređenja poslovanja, uravnoteženog razvoja tvrtke, kao i očuvanja konkurentnosti i pozicije na tržištu. S tim u svezi, tvrtka je u svoje poslovanje uvela sustav kontrole i zaštite kvalitete, te je 2004. godine certificirana po međunarodnoj normi za kvalitetu ISO 9001.

Danas je u *Zavodu za fotogrametriju d.d.* zaposleno 75 djelatnika, od čega 85% geodetskih stručnjaka, a visoku i višu stručnu spremu ima oko 40% zaposlenika. Stalna pažnja posvećuje se stručnom usavršavanju i obrazovanju zaposlenika, koji raspolažu s najsuvremenijom geodetskom, fotogrametrijskom i informatičkom opremom i softverima, kao i voznim parkom od 15-tak vozila.



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*Zavod za fotogrametriju d.d.* posluje u vlastitoj poslovnoj zgradi od oko 1000 m<sup>2</sup>, s vlastitim parkiralištem, te pratećim objektima, garažama, radionom i skladištima.

U *Zavodu* se oduvijek njeguje sinergija iskusnih i provjerenih stručnjaka, te novih generacija, sa znanjem o novim tehnologijama i s novim pogledima na geodetsku struku. Takva sinergija davala je kroz povijest *Zavoda* odlične rezultate i garancija je očuvanja kvalitete proizvoda i ugleda tvrtke u budućnosti.

Novo vrijeme postavlja pred cjelokupno gospodarstvo nove zahtjeve i zadatke. *Zavod za fotogrametriju d.d.* prati nove trendove i postupno se prilagođava novim uvjetima poslovanja i tržišta što nam donose buduća vremena i integracija u europsku zajednicu. I nakon 45 godina poslovanja, *Zavod za fotogrametriju* je i dalje u vrhu hrvatskog geodetskog gospodarstva, na zadovoljstvo korisnika, zaposlenika, poslovnih partnera i dioničara.

Robert Paj

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