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Newsletter **5**

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IAHR Media Library Website Celebrates its First Year: Upgrades and Expansion

www.iahrmedialibrary.net

The IAHR Media Library website was officially launched on November 15, 2004 and the first files were inserted on February 10, 2005. More than a year has passed since the birth of the site and the total number of visitors has surpassed 18,000. Much more than a year has passed since I was first contacted by Chris George to lead the development of the site up until the last meeting of the IAHR Conference in Thessaloniki in 2003 and the IAHR River Flow Conference in Naples, Italy in 2004. After one year of having the site up and running, I would like to present a small summary of the site's activity.

Initiative of the IAHR Media Library

The IAHR Media Library concept regarding films of interest to Fluid Mechanics was previously employed by ASME, as one reads in the Journal of Fluids Engineering, June 1976, pp. 151-155. Of course, not having a website in 1976, the Fluid Mechanics Committee accumulated a film catalogue, realizing, however, that many of these films were not widely distributed amongst researchers. To help with putting these films into the hands of researchers, the creation of an Engineering Societies Library (ESL) was proposed in order to obtain, conserve and distribute the videos. The IAHR Media Library represents the evolution of that idea. Many thanks to all those who have contributed to the success of this website so far, and in particular, to Professors H. Chanson, M. Muste and Y. Yasuda who have supplied the majority of contributions. In fact, the contributions published so far come from internationally respected authors who have sent high quality movies and photos with great comments and attached references. Obviously, a greater participation in the IAHR Media Library is desirable for the future and for further development. Ideas for development include (i) broadening the number of contributions to the IAHR sections still devoid of material, (ii) making a publication (text and other) of a more detailed description of film footage present on the site, (iii) organizing lessons to be presented on the Internet (paid or free) available to a large audience (with very little cost due to savings in travel and lodging. Another initiative is the establishment of an

Editorial Advisory Board with the function of collaboration and revision of multi-media products and of relevant comments. In addition to myself, the members of the IAHR Media Library Editorial Advisory Board are: Prof. Hubert Chanson (The University of Queensland, Australia, e-mail: H.Chanson@mailbox.uq.edu.au), Prof. Peter Davies (The University of Dundee, UK, e-mail: p.a.davies@dundee.ac.uk), Prof. Marian Muste (The University of Iowa, USA, e-mail: mvmuste@engineering.uiowa.edu) and Prof. Youichi Yasuda (Nihon University, Japan, e-mail: yokyas@civil.cst.nihon-u.ac.jp), Dr. Christopher George (IAHR Secretariat, Madrid, Spain, e-mail: christopher.george@iahr.org) and Prof. Aronne Armanini (The University of Trento, Italy, e-mail: aronne.armanini@ing.unitn.it).

has been created through the MWWD Conferences on Marine Waste Water Discharges and Coastal Environment website and IAHR Media Library for reciprocal publication. All of this testifies to the success of the site by involving other scientific organizations. I would be grateful for suggestion of other analogous sites of quality with which we could insert links.

Budget

The IAHR Media Library needs a certain budget in order to be developed and sustained. It would be advantageous to have funding from sponsors. So far, all financing has been negotiated from research projects at the Technical University of Bari. Amongst other things, an upgrade and improvement/expansion phase is being

Links

The IAHR Media Library website includes links to other websites relevant to analogous initiatives (such as Hydraulic Instrumentation Database, SIU - Digital Images of Environmental and Water Resources Engineering, e-fluids, Gallery of Fluid Mechanics). Recently an exchange of links

carried out on the IAHR Media Library site. In fact on the home page of the website a banner describing this operation has been added.

The IAHR Media Library upgrade cost (approximately 12,000 Euro) will be completely financed by my research group at the Technical University of Bari. The

upgrade consists of: (i) more professional hosting with greater hard disk size, (ii) a new database and search engine with suitable technology for cross-searching, (iii) indexing of the multimedia files (movies, animations, drawings, and photos) currently on the site, and, (iv) expansion of the website contents with thousands of new multimedia records.

Statistics

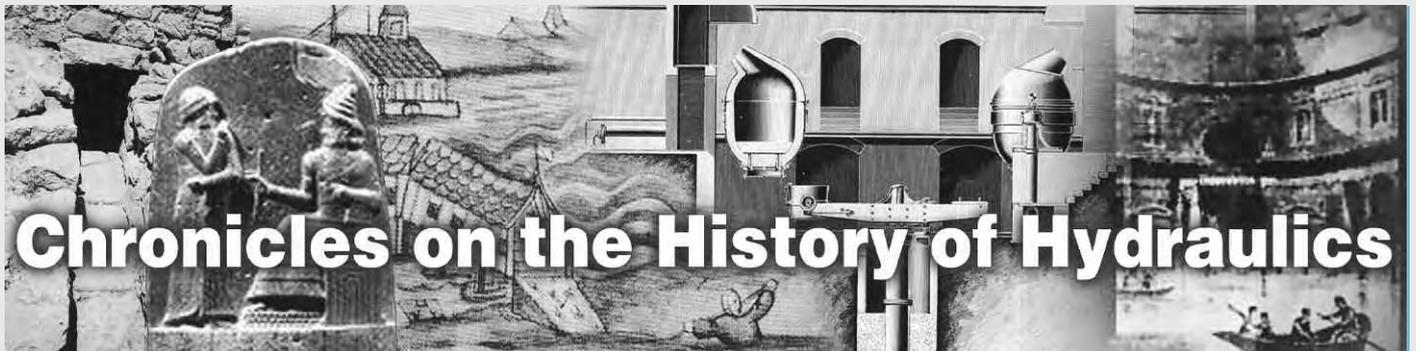
During the last year the number of visitors to the IAHR Media Library has dramatically increased - from around 400 per month in April 2005 to around 1800 per month in April 2006.



B-727 in flight during vortex study. Courtesy of Dr Marian Muste, IIHR - Hydraulics & Engineering, University of Iowa.

The enthusiastic success of the site requires new efforts to improve and eliminate several weaknesses in the present service. Anyone interested in collaborating with proposed improvements as well as submitting contributions (which are all attributed) can contact me at the e-mail address below, or one of the members of the Advisory board at the aforementioned e-mail addresses.

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Sea Ports in Antiquity

Sea-trade and transport has been important since the Neolithic period, as it is known that as early as the 8th and 7th millennium BC large islands like Cyprus and Crete have been colonized by people carrying their cattle with them. By the 4th millennium BC the sailing ship was in use both in lower Mesopotamia for sea-trade within the Persian Gulf and on the Nile. In the 3rd millennium BC, sea-trade extended from Mesopotamia as far as to the Indus valley, and from Egypt to the ports of Byblos and Sidon (now on the Lebanon coast) and in the Red Sea; the Minoan civilization of Crete developed also sea-trade, followed by the Mycenaeans of Greece in the 2nd millennium BC. In the first millennium BC the Phoenicians (from present Lebanon), the Greeks, the Etruscans (from Italy), developed long-distance sea-routes in the Mediterranean Sea. Later on, the Romans in their turn used the sea as a very convenient way of travelling and carrying goods.

Sea-trade means ports. It is known that in the earliest civilisations (Mesopotamia, Egypt), the ports were in fact on the large

ivers, the Euphrates and the Nile. In other countries, ships were simply hauled upon a beach in any places sheltered enough from storm waves. But the development of large fleets brought the necessity to anchor or keep a large number of ships in the same place, and building wharfs made easier the loading and unloading of ships. This was probably the initial motivation for the construction of proper sea ports.

The Mycenaean sea port in Pylos (by 1400 BC)

Pylos, a place on the western coast of the Peloponnese in Greece, is supposed to be the homeland of Nestor, one of the heroes of Homer's Iliad. The remains of a nicely designed Mycenaean harbour have been identified there by the German archaeologist E. Zangger. By 1400 BC, in Pylos, an artificial port had been dug inland, and a small part of the flow of a river had been derived through the port, through a channel dug across a rocky hill, and through an artificial lake acting as a desalting basin for the river flow (Figure 1). Flowing through the lake and the port to the sea, this flow

allowed to prevent the port entrance from being closed by the sand carried by the waves. By 1200 BC, with the collapse of the Mycenaean civilization, the river flow was no longer controlled, and its entire flow used to take the same route, through the lake and the port direct to the sea. Today, what used to be the port's basin has become a cultivated orchard, but its contours appear as a flat surface, easily recognizable (Figure 2).

Sea ports in antiquity

Managing a good sea port in antiquity might be done through the building of dykes, allowing to improve a natural shelter (a bay or an island). The Greek historian Herodotus reports in the 5th century BC that for the ancient port of Samos a dyke about 350 m long was built in deep water (up to 35 m deep!). In Alexandria, in the 3rd century BC, a dyke was built as well, 1000 m long, between the island of Pharos and the sea-shore, managing to create in this way two basins, one each side of the dyke; and on the isle of Pharos, the well-known Lighthouse (one of the antique world's marvels) was built.