

presented here. The solution method is based on conservation equations in integral form with appropriate initial and boundary conditions.

The solution domain is subdivided into a finite number of control volumes which can be of an arbitrary polyhedral shape and are typically locally refined in regions of rapid variation of flow variables. The time interval of interest is also subdivided into time steps of appropriate size. The governing equations contain surface and volume integrals, as well as time and space derivatives. These are approximated for each control volume and time level using suitable finite approximations, leading to an algebraic equation system which can be solved efficiently on a multi-processor computer.

The flow is assumed to be governed by the Reynolds-averaged Navier-Stokes equations. Turbulence effects can be accounted for by a variety of models, from the simplest eddy-viscosity type models ($k-\epsilon$ or $k-\omega$ models are typically used) up to the Reynolds-stress models. Thus, the continuity equation,

momentum equation, and between two and seven equations for turbulence properties are solved. Large-eddy simulations, which model only the small-scale turbulence and resolve large-scale eddies, are also possible.

Multi-phase, multi-component systems (water-air or water-chlorine in the applications shown here) can also be simulated. The spatial distribution of the phases (liquid and gas) is obtained by solving an additional transport equation for the volume fraction of each additional phase. To accurately simulate the convective transport of immiscible fluids, the discretization must be nearly free of numerical diffusion.

For this purpose, a special high-resolution interface-capturing (HRIC) scheme is used, providing a sharp resolution of free surfaces and allowing simulation of flow with trapped gas bubbles in liquid or liquid blobs in gas.

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Seafarers' Evening- 61st Anniversary

Jadran Marinković (Head of Radio Show)



Figure 1. Editor Jadran Marinković.

Pomorska večer (engl. *Seafarers' Evening*), a programme about sea and the people related to the sea, especially intended for seafarers and their families, is one of the oldest programmes of the Croatian Radio. For the first time, entitled as A PROGRAMME FOR SEAFARERS, it was transmitted on July, 8th 1952, so this year has been the 61st anniversary of its continuous transmission every Monday. It used to last for an hour, then two hours, and currently it is transmitted from 20.15 hours till midnight and from 5 "maritime" radio stations of the Croatian radio: Pula, Dubrovnik, Rijeka, Zadar and Split.

In the period of Morse symbols, without satellite navigation, mobile phone or Internet

the programme was a link to the distant seas and oceans via medium and short waves of the Croatian Radio. Greetings and messages, news from the homeland, proceeding of the vessels used to be a kind of challenge to the listeners, not only at sea, but also on the continent and Croatian emigrants.

The programme that has been with us for more than 60 years sticks to the rule "*with the taste of the sea, with the taste of the salt*" – regarding not only the stories and coverages, but also our distinctive music. There is a small number of even larger maritime countries with this type of a specialized programme dealing with all important topics from the field of maritime affairs, fishing, shipbuilding, port operations, safety of navigation. In numerous coverages, meetings, notes, severe comments and public warnings the programme editors have always strived to take the side of the seafarers, fisherfolk and dockers wishing for the things to get better and gain more success as the sea and vessels have always been a source of living.

Seafarers' Evening, which has already become a cult, every Monday wishes to convince both the general public, but especially those involved in politics that Croatia should be a MARITIME and not only a COASTAL country, some 20,000 seafarers the majority of whom unfortunately man foreign vessels not being the only reason.