## Accepted Manuscript

A High-Order Hybrid Turbulence Model with Implicit Large-Eddy Simulation

Asiful Islam, Ben Thornber

 PII:
 S0045-7930(18)30135-X

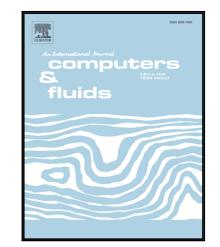
 DOI:
 10.1016/j.compfluid.2018.03.031

 Reference:
 CAF 3792

To appear in:

Computers and Fluids

Received date:8 August 2017Revised date:20 February 2018Accepted date:9 March 2018



Please cite this article as: Asiful Islam, Ben Thornber, A High-Order Hybrid Turbulence Model with Implicit Large-Eddy Simulation, *Computers and Fluids* (2018), doi: 10.1016/j.compfluid.2018.03.031

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Highlights

- Establishes new hybrid turbulence modelling algorithm with grid and flow adaptation.
- Implements hybrid Reynolds-Averaged Navier-Stokes and Implicit Large-Eddy Simulation in Compressible high-order accurate solver.
- Maintains excellent boundary layer performance at low-Mach, high-Re conditions.
- Accurately captures mean and unsteady results around cylinder with boundary layer curvature, in the subcritical flow regime.
- Extensive validation against experimental data, Large-Eddy Simulation and Detached-Eddy Simulation based approaches.

1

Download English Version:

https://daneshyari.com/en/article/7156259

Download Persian Version:

https://daneshyari.com/article/7156259

Daneshyari.com