## **ABSTRACT**

Two-dimensional turbulent flow over airfoil NACA 2412 with different angles of attack was studied. Primitive variables method was used with body fitted coordinates to overcome the complicated shape of the airfoil. Angle of attack was increased gradually from zero to 20 degrees in a step of 5 degrees. The separation onset seems to appear at nearly 16 degrees. k-w turbulent model succeeds in predicting the onset of separation compared with experimental value