

command (unsaturated)

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        !   saturate the overall command using the pitch angle limits:
        PitComT   = MIN( MAX( PitComT, PC_MinPit ), PC_MaxPit )           ! Saturate
the overall command using the pitch angle limits
ENDIF

DO K = 1,NumBl ! Loop through all blades
    PitRate(K) = ( PitComT - BlPitch(K) )/ElapTime                       ! Pitch rate
of blade K (unsaturated)
    PitRate(K) = MIN( MAX( PitRate(K), -PC_MaxRat ), PC_MaxRat )        ! Saturate the
pitch rate of blade K using its maximum absolute value
    PitCom (K) = BlPitch(K) + PitRate(K)*ElapTime                       ! Saturate the
overall command of blade K using the pitch rate limit
ENDDO                ! K - all blades

! Reset the value of LastTimePC to the current value:
LastTimePC = ZTime

IF ( controlDebug ) THEN
    WRITE(*,*)  'Time=',ZTime,'pitCount=',pitCount,'HSS_Spd=',HSS_Spd,&
                'GenSpeedF=',GenSpeedF,'PitCom=',PitCom(1),'PitComP= ',&
                PitComP,'PitComI= ',PitComI,'PitComT= ',PitComT
                pitCount=pitCount+1
ENDIF

ENDIF

BlPitchCom_out = PitCom                ! Pass the most recent blade pitch command
out of the subroutine

RETURN
END SUBROUTINE PitchCntrl
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