

NOUS41 KWBC 312100
PNSWSH

PUBLIC INFORMATION STATEMENT...SERVICE CHANGE NOTICE 01-58
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC
400 PM EST WED OCT 31 2001

TO: FAMILY OF SERVICES /FOS/ SUBSCRIBERS
NOAA WEATHER WIRE SERVICE /NWS/ SUBSCRIBERS
EMERGENCY MANAGERS WEATHER INFORMATION NETWORK /EMWIN/
SUBSCRIBERS
OTHER NWS CUSTOMERS...PARTNERS AND EMPLOYEES

FROM: JAMES E. LEE
CHIEF...FIRE AND PUBLIC WEATHER SERVICES BRANCH

SUBJECT: REMINDER: NEW WIND CHILL TEMPERATURE INDEX...EFFECTIVE NOVEMBER 1
2001

...THIS IS A REMINDER. THE ORIGINAL MESSAGE ABOUT THIS IMPLEMENTATION WAS
TRANSMITTED ON AUGUST 30 2001...AND RESENT ON OCTOBER 2 2001... REFER TO
[SERVICE CHANGE NOTICE 01-49](#)...

EFFECTIVE TUESDAY...NOVEMBER 1 2001...THE NATIONAL WEATHER SERVICE WILL
IMPLEMENT A NEW WIND CHILL TEMPERATURE INDEX. THE LATEST ADVANCES IN
SCIENCE...TECHNOLOGY AND COMPUTER MODELING HAVE RESULTED IN A
SIGNIFICANTLY IMPROVED WIND CHILL INDEX. THE NEW INDEX WILL PROVIDE A
MORE ACCURATE...UNDERSTANDABLE AND USEFUL FORMULA FOR CALCULATING THE
POTENTIAL DANGER FROM THE COMBINATION OF WIND AND COLD TEMPERATURES. THE
METEOROLOGICAL SERVICES OF CANADA IMPLEMENTED THIS SAME WIND CHILL INDEX
ON OCTOBER 3 2001.

THE NEW WIND CHILL INDEX WILL:

- USE CALCULATED WIND SPEED AT AN AVERAGE HEIGHT OF FIVE FEET /TYPICAL
HEIGHT OF AN ADULT HUMAN FACE/ BASED ON READINGS FROM THE NATIONAL
STANDARD HEIGHT OF 33 FEET /TYPICAL HEIGHT OF AN ANEMOMETER/.
- BE BASED ON A HUMAN FACE MODEL.
- INCORPORATE MODERN HEAT TRANSFER THEORY...I.E...HEAT LOSS FROM THE BODY
TO ITS SURROUNDINGS DURING COLD AND BREEZY/WINDY DAYS.
- LOWER THE CALM WIND THRESHOLD FROM 4 MPH TO 3 MPH.
- USE A CONSISTENT STANDARD FOR SKIN TISSUE RESISTANCE...AND
- ASSUME NO IMPACT FROM THE SUN.

THE WIND CHILL TEMPERATURE WILL CONTINUE TO BE ROUTINELY ISSUED EVERY HOUR
ON AN EVENT DRIVEN BASIS ON HOURLY WEATHER ROUNDUPS /HWR/. NO
COMMUNICATIONS CHANGES ARE REQUIRED TO RECEIVE THE NEW WIND CHILL
TEMPERATURE.

A MORE DETAILED DESCRIPTION OF THE NEW WIND CHILL INDEX...INCLUDING THE NEW WIND CHILL CHART...FORMULA...AND COMPARISON GRAPHIC BETWEEN THE OLD AND NEW INDEX...CAN BE FOUND AT THE FOLLOWING WEB ADDRESS /USE LOWER CASE LETTERS/:

[HTTP://WWW.NWS.NOAA.GOV/OM/WINDCHILL](http://www.nws.noaa.gov/om/windchill)

IF YOU HAVE QUESTIONS OR COMMENTS ABOUT THIS CHANGE...PLEASE CONTACT:

MARK TEW
PUBLIC WEATHER PROGRAM MANAGER
PHONE: 301-713-1970 EXT. 103
MARK.TEW@NOAA.GOV

NATIONAL SERVICE CHANGE NOTICES ARE ONLINE AT /USE LOWER CASE/:

[HTTPS://WWW.WEATHER.GOV/NOTIFICATION/ARCHIVE](https://www.weather.gov/notification/archive)

END
NNNN