

ONCE A TEACHER...ALWAYS A TEACHER...  
HISTORY LESSON (BRIEF) ON METEOROLOGY IN THIS COUNTRY...WITH  
SPECIAL EMPHASIS ON WEATHER FORECASTING...  
TRY TO HELP PUT THE WEATHER CHANNEL INTO PERSPECTIVE  
METEOROLOGICALLY SPEAKING...

I CHOOSE TO START...WAY BACK IN 1849, WHEN THE FIRST  
WEATHER OBSERVATIONS WERE TRANSMITTED BY TELEGRAPH, MAKING IT  
POSSIBLE FOR THE FIRST TIME FOR THE RAPID COLLECTION AND REAL-  
TIME ANALYSIS OF WEATHER DATA. ANALYZED MAPS WERE USED TO PREPARE  
THE FIRST FORECASTS.

BY 1860, THERE WERE 500 STATIONS REPORTING THE WEATHER.  
THIS COMPARES SURPRISINGLY WELL WITH THE 1500 STATIONS NOW IN THE  
NATIONAL OBSERVING NETWORK. FORECASTS THAT WERE BASED ON MORE  
THEN THE LOCAL OBSERVATIONS FIRST BECAME POSSIBLE ABOUT THEN.

FROM THE VERY BEGINNING, WEATHER FORECASTERS HAVE BEEN  
REMEMBERED MORE FOR THEIR FAILURES THAN THEIR SUCCESSES ON THE  
WEATHER CHANNEL STAFF...ANY FORECASTER CAN SYMPATHIZE WITH THE  
POOR FELLOW ABOUT WHOM PRESIDENT LINCOLN SAID AND I QUOTE  
"IT SEEMS TO ME THAT MR. COPEN KNOWS NOTHING ABOUT THE WEATHER IN  
ADVANCE. HE TOLD ME THREE DAYS AGO IT WOULD NOT RAIN. IT IS  
RAINING NOW AND HAS BEEN FOR 10 HOURS. I CANNOT SPARE ANY MORE  
TIME TO MR. COPEN."

IN 1870, A NATIONAL METEOROLOGICAL SERVICE WAS CREATED  
BY AN ACT OF CONGRESS UNDER THE DIRECTION OF THE ARMY SIGNAL CORPS.  
BY 1872, NATIONAL FORECASTS WERE BEING ISSUED ON A DAILY BASIS.

THE WEATHER FORECASTS THEN WERE BASED SOLELY ON SURFACE  
WEATHER CHARTS...THE NEWSPAPERS DISSEMINATED THESE FORECASTS.

THEY WERE ALSO POSTED ON LOCAL POST OFFICE BULLETIN BOARDS, OR HUNG IN HOTELS, STORES, RR STATIONS, AND OTHER PUBLIC PLACES, AND FOR 30 YEARS, ACTUALLY DELIVERED BY THE U.S. POST OFFICE... WEATHER POSTCARDS, FOR A TIME CAME WITH THE DAILY MAIL, OR FORECASTS ON CANCELLING HANDSTAMPS. THE SERVICE STOPPED IN THE MID 20's WHEN THE POSTAL SERVICE BECAME TOO BIG, TOO EXPENSIVE AND TOO SLOW....

THE NEXT BIG STEP FORWARD CAME IN THE 1930's WITH THE BEGINNING OF ROUTINE UPPER OBSERVATIONS BY BALLOON CARRIED INSTRUMENTS CALLED RADIOSONDES, WHICH MEASURE AND TRANSMIT T,P, AND HUMIDITY INFORMATION AND ALLOW FOR WIND CALCULATIONS FOR THE UPPER ATMOSPHERE. UP WHERE SURFACE WEATHER FEATURES GET THEIR START, THEIR SUPPORT AND THEIR STEERING.

AT THAT TIME THE USWB WAS THE SOURCE OF WEATHER FORECASTS AND THE NEWSPAPER AND RADIO WERE THE WAYS THE PUBLIC GOT WEATHER INFORMATION.

SHORTLY AFTER CAME RADAR, DEVELOPED IN SECRECY DURING THE WAR YEARS FOR DETECTING ENEMY AIRCRAFT, THE PRECIPITATION THAT APPEARED ON THE SCREEN WAS CONSIDERED A NUISANCE THEN...BUT AFTER THE WAR, IT QUICKLY BECAME APPARENT THAT RADAR OFFERED INTERESTING POSSIBILITIES IN METEOROLOGY. THERE WAS A RAPID GROWTH OF RADAR USE THEN IN PRECIPITATION AND STORM DETECTION.

TODAY THE LATEST RADAR VIEWS ARE INSTANTLY ACCESSIBLE IN COLOR FOR THE COUNTRY OR ANY PART OF THE COUNTRY BY PHONE. AND THERE IS NOW DOPPLER RADAR THAT NOT ONLY SEES PRECIPITATION DROPLETS BUT ALSO MEASURES THEIR MOVEMENT...ENABLING US TO LOOK FOR THE ROTATION THAT IS PRESENT IN SEVERE STORMS AND TORNADOES.

IN THE 1940s, THE PUBLIC STILL GOT THEIR WEATHER INFORMATION FROM THE USWB VIA BOTH RADIO AND THE NEWSPAPER....

IN THE 1950s AND 60s CAME THE HIGH SPEED COMPUTERS AND THE NUMERICAL WEATHER PREDICTION MODELS....SYSTEMS OF EQUATIONS THAT DESCRIBE THE TEMPERATURE, MOISTURE AND WIND BEHAVIOUR OVER THE ENTIRE ATMOSPHERE ON A CONTINENTAL OR EVEN HEMISPHERIC SCALE.

THESE EQUATIONS ARE PREDICTIVE IN THE SENSE THAT THEY CAN BE SOLVED FOR A FUTURE STATE OF THE ATMOSPHERE USING THE PRESENT CONDITIONS. CURRENT NUMERICAL MODELS FORM THE BASIS OF MODERN FORECASTING AND (ANY FORECASTER HERE WILL TELL YOU) GIVE VERY GOOD RESULTS IN THE SHORT TERM.

IN THE 50s TV EMERGED AS AN IMPORTANT AND INTERESTING PROVIDER OF WEATHER INFORMATION, THE USWB STILL THE PRINCIPLE SOURCE.

THE NEXT BIG ADVANCE BEGAN APRIL 1, 1960 WHEN TIROS 1, THE FIRST WEATHER SATELLITE, WAS LAUNCHED INTO A 725 KM HIGH ORBIT ALLOWING A FRESH LOOK AT OLD WEATHER PATTENRS. SINCE 1960, THE WEATHER SATELLITES HAVE BECOME MORE SOPHISTICATED. OVER THE PAST TWO DECADES THERE HAVE BEEN 12 OPERATIONAL WEATHER SATELLITES, PROVIDING VISIBLE AND INFRA-RED PICTURES AND REMOTE MEASUREMENT OF ATMOSPHERIC TEMPERATURE, HUMIDITY AND WINDS.

THERE ARE FOUR OPERATIONAL SATELLITES NOW POSITIONED AROUND THE GLOBE OVER THE EQUATOR AT HEIGHTS THAT ALLOW THEM TO ROTATE AT THE SAME SPEED AS THE EARTH BELOW. THESE "GEOSTATIONARY" SATELLITES PROVIDE NEARLY COMPLETE GLOBAL MONITORING OF WEATHER FEATURES.

DURING THE 60s and 70s, PRIVATE WEATHER COMPANIES SPROUTED UP LIKE WEEDS, PROVIDING WEATHER FORECASTS TO THE MEDIA AND INDUSTRY, MORE SPECIALIZED SERVICES THAN THE USWB WHICH BECAME

THE NWS DURING THIS PERIOD COULD OR WOULD PROVIDE.

DURING THIS TIME, TV BECAME THE PUBLIC'S #1 SOURCE OF WEATHER INFORMATION. BY 1980, A NATIONAL WEATHER SERVICE SURVEY INDICATED THAT TV WAS THE MAIN SOURCE OF LOCAL WEATHER INFORMATION FOR 54% OF THOSE POLLED. THIS WAS TRUE DESPITE THE FACT THAT ON A TYPICAL STATION ONLY 18 MINUTES ON AN AVERAGE BROADCAST DAY WAS DEVOTED TO WEATHER COVERAGE. RADIO CAME IN SECOND WITH 36%, NEWSPAPER WAS THE MAIN LOCAL WEATHER SOURCE FOR ONLY 2% OF THE PUBLIC.

FINALLY IN THE LAST FEW YEARS, ANOTHER COMPUTER REVOLUTION. THIS TIME COMPUTERS GATHERING, PROCESSING AND DISSEMINATING WEATHER INFORMATION. COMPUTERS ARE CURRENTLY REPLACING THE TRADITIONAL WEATHER DATA SOURCES...THE TELETYPES AND WITHIN THE NEXT DECADE, THE FACSIMILE CIRCUITS. WSI IS A COMPANY PIONEERING IN THIS NEW TECHNOLOGY.

IN THE LAST FEW YEARS, MANY PRIVATE WEATHER COMPANIES WHICH HAD DONE WELL FOR A TIME HAVE BEEN FEELING THE PINCH OF INFLATION AND RECESSION AND ARE STRUGGLING...AND THE NATIONAL WEATHER SERVICE, FEELING THE EFFECTS OF FEDERAL BUDGET CUTBACKS, IS REDUCING ITS STAFF AND SERVICES....BOTH AT A TIME WHEN THE PUBLIC INTEREST AND NEED FOR WEATHER INFORMATION IS GREATER THAN EVER.... TELEVISION, THE PRIMARY SOURCE OF WEATHER INFORMATION, IS ITSELF IN TRANSITION (AS BOTH DUBBY AND JOHN SAID). THE COUNTRY IS BECOMING RAPIDLY CABILIZED...DILUTING THE IMPORTANCE OF THE LOCAL STATIONS IN THE MARKET. CABLE VIEWERS ARE INCREASINGLY RELYING ON THE MULTITUDE OF SPECIALIZED SERVICES AVAILABLE ON THEIR CABLE SET FOR INFORMATION AND ENTERTAINMENT THEY ONCE GOT ELSEWHERE. (RECALL THE A.C. NEILSON NATIONAL CABLE MARKET SURVEY FOUND 77% OF CURRENT CABLE VIEWERS ALREADY GET THEIR WEATHER INFORMATION FROM TV....60% WATCH EACH DAY...)

IT IS IN THIS SETTING THAT IN THE SPRING OF 1982 ALONG COMES THE WEATHER CHANNEL, EMPLOYING THE SUM TOTAL OF ALL THE TECHNOLOGIES IN THEIR MODERN SOPHISTICATED VISUAL FORMS, DEVELOPING SOME NEW, INNOVATIVE TECHNOLOGIES OF ITS OWN LIKE THE WEATHER STAR, USING NEWLY EMERGING COMPUTER ART AND GRAPHICS SYSTEMS FOR A LIVELY NEW AND EXCITING DISPLAY OF THIS INFORMATION, ASSEMBLING A LARGE, VERY COMPETENT STAFF TO PREPARE AND DELIVER THIS WEATHER INFORMATION... CONSTANTLY UPDATING CURRENT CONDITIONS, FINE TUNING FORECASTS, AND PRESENTING IT IN AN INTERESTING, ENTERTAINING AND PERSONABLE MANNER. DOING SO 24 HOURS A DAY, 7 DAYS A WEEK.

THE TIMING IS PERFECT...THE PUBLIC NEED FOR WEATHER INFORMATION IS HIGH. TV IS ALREADY THE PRINCIPLE SOURCE OF WEATHER INFORMATION...AND TV IS IN TRANSITION...DURING CABLES' RAPID GROWTH PHASE, IT WILL BE EASIER TO BREAK VIEWER HABITS...THEY ARE ADJUSTING TO THE IDEA THAT THEIR TVs CAN PROVIDE A GREAT VARIETY OF SPECIALIZED SERVICES AND INFORMATION. THEY ARE SAMPLING THE WARES.

THEY ARE BECOMING ACCUSTOMED TO TUNING TO THE CABLE NEWS NETWORK FOR NEWS, THE SPORTS CHANNEL FOR SPORTS WHEN THEY WANT IT. THEY SHOULD QUICKLY LEARN TO USE THE WEATHER CHANNEL FOR WEATHER WHENEVER THEY WANT OR NEED IT...WE OFFER 24 HOURS REMEMBER INSTEAD OF 18 MINUTES EACH DAY...AN 8000% IMPROVEMENT.

IT IS NOT SURPRISING THAT AMONG PEOPLE WHO SHOULD KNOW, THE GENERAL CONSENSUS IS THAT WE WILL BECOME THE #1 SOURCE OF WEATHER INFORMATION FOR THE NATION. THAT IS OUR MISSION...OUR GOAL IS TO BE ALSO, THE BEST...EACH ONE OF YOU, REGARDLESS OF DEPT. OR POSITION HAS A KEY ROLE IN THAT REGARD.

NO DOUBT ABOUT IT, HERE ON THIS MARCH 1, 1982 WE ARE ABOUT TO EMBARK ON THE MOST EXCITING ADVENTURE OF OUR LIFETIMES.

VERY LIKELY THE MOST CHALLENGING, POSSIBLY THE SINGLE MOST  
IMPORTANT METEOROLOGICAL UNDERTAKING EVER.

I WANT YOU TO THINK ABOUT THAT.....A LOT, IN THE WEEKS  
AND MONTHS AHEAD. I LOOK FORWARD TO WORKING WITH ALL OF YOU.

Speech by Joe D'Aleo  
on Orientation Day at  
THE WEATHER CHANNEL  
March 1, 1982