

Secretary of State. In addition, this same law states that "the President [FCC] may withhold * * * such license when he shall be satisfied after notice and hearings that such action will assist . . . in maintaining the rights or interests of the United States or of its citizens in foreign countries * * *." I have requested the Secretary of State to withhold his approval of Telebermuda's license application, until the case involving my constituents is resolved.

Mr. President, this case is not only important to my constituents, it is important for all businesses who operate overseas. It is our duty to ensure that they are treated fairly. We cannot allow foreign governments to take advantage of U.S. businesses. If the Bermudian telephone monopoly or other Bermudian interests want to buy the MacDonalds interest in Bermuda Cable they should pay the fair market price for the MacDonalds interest in the company. Mr. President, I am not asking for special treatment for the MacDonalds, but I believe they are entitled to receive justice.

Mr. President, I hope that the Bermudian Government will reexamine this situation involving my constituents and determine that it is in their best interest to treat all businesses fairly and not punish people because they are from the United States or other foreign countries.

THE YEAR 2000 COMPUTER PROBLEM

Mr. MOYNIHAN. Mr. President, on the 31st of July, I took the liberty of writing to the President concerning a problem that could have extreme negative economic consequences in the year 2000 when we will have to make the transition of computers from the 20th to the 21st century.

This is a matter that will necessarily concern the Congress. I ask unanimous consent that my letter to the President and a summary of an accompanying report by Richard M. Nunno be printed in the RECORD at this point. Cost considerations prevent having the entire report printed in the RECORD. The report can be obtained from the Congressional Research Service.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

U.S. SENATE,
Washington, D.C., July 31, 1996.

The PRESIDENT,
The White House,
Washington, DC.

DEAR MR. PRESIDENT: I hope this letter reaches you.

I write to alert you to a problem which could have extreme negative economic consequences during your second term. The "Year 2000 Time Bomb." This has to do with the transition of computer programs from the 20th to the 21st century.

The main computer languages from the '50s and '60s such as COBOL, Fortran, and Assembler were designed to minimize consumption of computer memory by employing date fields providing for only six digits. The

date of this letter in "computerese," for example, is 96-07-31. The century designation "19" is assumed.

The problem is that many computer programs will read January 1, 2000 as January 1, 1900. Computer programs will not recognize the 21st century without a massive rewriting of computer codes.

I first learned of all this in February and requested a study by the Congressional Research Service. The study, just now completed, substantiates the worst fears of the doomsayers. (A copy of the CRS study is attached.) The Year 2000 problem ("Y2K") is worldwide. Each line of computer code needs to be analyzed and either passed on or be rewritten. The banking system is particularly vulnerable. A money center bank may have 500 million lines of code to be revised at a cost of \$1 per line. That's a \$500 million problem. (I learn from Lanny Davis that his client, the Mars Company, estimates the cost of becoming Y2K date compliant at \$100 million to \$200 million. Mars is only a candy company.) One would expect that a quick fix of the problem would have been found but it hasn't happened and the experts tell me it is not likely.

There are three issues. First, the cost of reviewing and rewriting codes for Federal and state governments which will range in the billions of dollars over the next three years. Second, the question of whether there is time enough to get the job done and, if not, what sort of triage we may need. I am particularly concerned about the IRS and Social Security in this respect. Third, the question of what happens to the economy if the problem is not resolved by mid-1999? Are corporations and consumers not likely to withhold spending decisions and possibly even withdraw funds from banks if they fear the economy is facing chaos?

I have a recommendation. A Presidential aide should be appointed to take responsibility for assuring that all Federal agencies including the military be Y2K date compliant by January 1, 1999 and that all commercial and industrial firms doing business with the Federal government also be compliant by that date. I am advised that the Pentagon is further ahead on the curve here than any of the Federal agencies. You may wish to turn to the military to take command of dealing with the problem.

The computer has been a blessing; if we don't act quickly, however, it could become the curse of the age.

Respectfully,

DANIEL PATRICK MOYNIHAN.

THE YEAR 2000 COMPUTER CHALLENGE (By Richard M. Nunno)

SUMMARY

Most computer systems in use today can only record dates in a two-digit format for the year. Under this system, computers will fail to operate properly when years after 1999 are used, because the year 2000 is indistinguishable from 1900. This problem could have a serious impact on a wide range of activities that use computers. Information systems must be inspected, and modified, if necessary, before January 1, 2000 to avoid major system malfunctions.

Many managers initially doubted the seriousness of this problem, assuming that an easy technical fix would be developed. Several independent research firms, however, have refuted this view, with the conclusion that inspecting all computer systems and converting date fields where necessary and then testing modified software will be a very time-consuming and costly task. Research firms predict that due to a lack of time and resources, the majority of U.S. businesses and government agencies will likely not fix

all of their computer systems by the start of the new millennium.

Most agencies and businesses have come to understand the difficulties involved, although some have not yet started implementing changes. Several companies have emerged offering services to work on the year-2000 conversion, and software analysis products are commercially available to assist with finding and converting flawed software code. Even with the assistance of these products, however, most of the work will still have to be done by humans.

Federal agencies are generally aware of the year-2000 challenge and most are working to correct it. Agencies that manage vast databases, conduct massive monetary transactions, or interact extensively with other computer systems, face the greatest challenge. An interagency committee has been established to raise awareness of the year-2000 challenge and facilitate federal efforts at solving it. The interagency committee has initiated several actions, such as requiring vendor software listed in future federal procurement schedules to be year-2000 compliant and specifying four-digit year fields for federal computers. The shortage of time to complete year-2000 computer changes may force agencies to prioritize their systems. Agencies may also need to shift resources from other projects to work on year-2000 efforts. State and local governments, as well as foreign organizations, will also have significant year-2000 conversion problems.

Congressional hearings have been held recently to investigate the year-2000 challenge, and a legislative provision was introduced directing the Defense Department to assess the risk to its systems resulting from it. Several options exist for congressional consideration. One option is to provide special funding to federal agencies for year-2000 conversion. While agencies are reluctant to request additional funds, some observers contend this may be necessary. Another option is to give agencies increased autonomy in reprogramming appropriated funds for year-2000 efforts. A third, less controversial alternative is to continue to raise public awareness through hearings and by overseeing federal efforts.

THE VERY BAD DEBT BOXSCORE

Mr. HELMS. Mr. President, at the close of business yesterday, Wednesday, September 4, the Federal debt stood at \$5,228,998,407,724.89.

Five years ago, September 4, 1991, the Federal debt stood at \$3,617,415,000,000.

Ten years ago, September 4, 1986, the Federal debt stood at \$2,113,008,000,000.

Fifteen years ago, September 4, 1981, the Federal debt stood at \$979,768,000,000.

This reflects an increase of more than \$4,249,230,407,724.89 during the 15 years from 1981 to 1996.

AVIATION SECURITY CHALLENGES

Mr. PRESSLER. Mr. President, I rise today to discuss the vitally important issue of aviation security challenges. Last month, the Commerce Committee which I chair held an open hearing to examine aviation security. Later this month, we will hold a closed hearing to further consider this vitally important issue.

At the outset, let me stress that the United States continues to have the