Chapter 7

The Era of World Wide Metrication

The metric study was released in July of 1971 with a title, which while appearing decisive, upon reflection is not: *A Metric America a Decision Whose Time Has Come*. The study is stunning in that a summary of its recommendations is given after the title page, and they appear unambiguous, unlike those of John Quincy Adams almost 150 years before. Their recommendations were:

- That the United States change to the International Metric System deliberately and carefully;
- That this be done through a coordinated national program;
- That the Congress assign the responsibility for guiding the change, and anticipating the kinds of special problems described in the report to a central coordinating body responsive to all sectors of our society;
- That within this guiding framework, detailed plans and timetables be worked out by these sectors themselves;
- That early priority be given to educating every American schoolchild and the public at large to think in metric terms;
- That immediate steps be taken by the Congress to foster U.S. participation in international standards activities;
- That in order to encourage efficiency and minimize the overall costs to society, the general rule should be that any changeover costs shall "lie where they fall."

- That the Congress, after deciding on a plan for the nation, establish a target date ten years ahead, by which time the U.S. will have become predominantly, though not exclusively metric;

- That there be a firm commitment to this goal.

These items were submitted and signed by Maurice H. Stans who was then Secretary of Commerce.

It seems immediately clear that those who produced this report did not note the warnings found in earlier metric hearings that a protracted length of transition will only cause an even longer delay. If given ten years to transition, procrastination will take up at least nine of those ten years. If this recommendation was taken to heart, it would probably defeat any metric switch-over, because in the system of government in the US—time kills. This protracted period of metric transition makes the recommendation of a "firm commitment to this goal" less than possible. The assertion that after this decade-long procrastination, we only needed to be "predominantly" metric, which is not a defined amount, made the goal a non-goal. In most cases this would be taken to be just over 50% metric at best.

Other countries who converted, and would convert in the future, allowed the costs to "lie where they fall," but with a US government which falls over itself to do the bidding of business, any perceived cost would cause them to veto the creation of any legislation which would produce actual reform.

By 1972 President Richard Nixon (1913-1994) called for the enactment of legislation which would permit a gradual transition to the metric system. Nixon stated this is "an important step which could be of great significance in fostering technological innovations and enhance our position in world trade." [1]

Hearings were held in the Senate in 1975 and presided over by Senator Daniel K. Inouye (1924-2012). Senator Claiborne Pell (1918-2009) was the first to speak at the hearings. Senator Pell claimed that "metric is inevitable." He believed that it was so inevitable, that a voluntary law would suffice. No one seemed to see the contradiction of a voluntary law with a ten year "time limit." If anyone had read the testimony of the 1921 metric hearings, they would have seen this was exactly the plan offered then. Fifty years had passed, and the voluntary 1921 metrication had effectively not worked, but this did not deter Congress from

implementing the same "voluntary plan" yet again in 1975.

Pell asserted that "metric conversion is going forward at an accelerating pace in the United States, on a voluntary basis." He continued:

> Indeed, metric conversion is moving ahead so rapidly now that the critical need is for Government action to provide essential mechanisms for coordination, planning, and information among Government agencies, among industrial groups, and between industry, Government, and labor.

The Department of Defense weighed in and indicated it had no interest in becoming metric.

A group called *The Engineers Joint Council* which claimed to represent 38 engineering societies indicated it would like to see the US go metric, but that: "It is not important, in our opinion, that the general public use every one of these units in their everyday life."

The AFL-CIO said that metric conversion was "premature" and claimed the current set of units is actually superior. The AFL-CIO then cites Market Darwinism as a reason to not have mandatory metrication:

> The Committee feels strongly that in any sector, the marketplace—not the Congress or the Metric Board—should provide the impetus in deciding whether, when and how metric conversion activities should proceed.

And:

> The AFL-CIO is concerned about the impact of metric conversion on its members as workers, as consumers, and as taxpayers.
>
> First and foremost, we are concerned that metric conversion will accelerate the deindustrialization of the United States, thus cause soaring unemployment

The Small Business Administration took issue with the ten year conversion period and saw possible disaster in a metric conversion:

. . . and there's no question that our best conversion period would be about 20 years, and to try to do it in 10 years would be horrendous and practically put us out of business, and we made quite a study of it. It is our understanding the

Small Business Administration has determined that under existing authority it may make economic disaster-type loans under Section 7(b) (5) of the SBA Act. It is also our understanding that the Office of Management and Budget and the Commerce Department concur in this decision. We have

just in the last couple of days checked again with the Small Business Administration and are advised that they believe that since this is a voluntary conversion act as opposed to a less voluntary act, which was discussed in the House last year, that they would not have authority at present to make hardship loans for metric conversion.

. . .

...but I do feel that if we are to go too fast we tend to ride roughshod over small business, which so frequently is not adequately heard, that it may do a real disservice to the country. In fact, as I said in the closing of my written statement, and as I have said for many years, and I believe it to be very true:

If the United States can complete the metric conversion process in a manner which inures to the economic advantage of small business—the 98 or 99 percent of the private economy—the conversion will have been a success; if this does not occur, the cost of conversion to the U.S. economy will require decades to be overcome, and may actually incur irreparable damage to the position of the United States in the economy of the world.

. . .

Senator Ford. Yes, sir. I understand it a little bit better. I understand what you're saying about the problems that would face you. It could be an economic disaster to convert involuntarily. There is a problem, even though it could be economically helpful. It also could be an economic disaster if its implemented too fast.

> **Mr. Beck.** That's right. We all recognize that there is a large one-time conversion cost which we want to get through as inexpensively as possible, admittedly, but on the other hand, the only way this is going to work is that there's going to be a long-term economic benefit. To the small businessman, the large conversion cost, whatever its size may be, is considerable to him because he's small and he maybe needs help to get over this hump in order that the benefits repay him over a period of years.

The American Bar Association stated they were against metric conversion, but were amazingly candid about what was happening:

> The point is that Government by its nature cannot be neutral, and in many cases so-called voluntary conversion cannot occur until there has been significant governmental action.
>
> . . .
>
> The House-passed bill, rather than simply expressing a national policy in favor of a coordinated approach to voluntary conversion and establishing housekeeping details for the proposed Metric Board, makes no change in existing law.

The ABA states that the legislation, does not contain any legislation. Amazingly, they go further by offering up an alternative:

> By the fifth clause of article I, section 8, of the Constitution of the United States, Congress is given express power to "fix the standard of weights and measures."
>
> Under this clause, under the commerce clause, and under the necessary and proper clause, Congress unquestionably has adequate constitutional authority to create a "measurement czar" whose metric conversion directives would preempt all inconsistent State laws.

In other words, the ABA indicates the Constitution grants Congress the power to impart the power to implement metric in the US to a single person, who as "measurement czar, would have all the powers they would require to implement metric in the US, should Congress wish to do so. The ABA then points out the vacuous nature of the legislation:

> As H.R. 8674 has emerged from the House, the policy direction apparently given by the Congress is circular: to plan planning. But what is the objective of this planning?
>
> When you plan you ordinarily have an objective?

Congress finally passed The Metric Conversion Act of 1975. It was signed by President Gerald Ford (1913-2006) on December 23rd of that year. Ford stressed in his signing statement, that the act was "a completely voluntary one" however. Ford did state that continuing to use English measurements "was making us an island in a metric sea." [2]

President Jimmy Carter (1924-) appeared to be at best apathetic to metric conversion. He stated in 1979: "It is the intent of the Metric Act, that the rate of metrication be governed by the marketplace, with the U.S. Metric Board playing but a facilitating part in the process." [3]

What is most amazing about this negative testimony, is that it was taking place during the period that the metric system was being adopted at a furious pace by other countries around the world. We can see in Figure 7.1 that a spike of metrication occurred in the 1970s, and then trailed off, as all but the US, Myanmar and Liberia became metric countries.

This rush to embrace the metric system around the world, bred a climate in the US of the 1970s, in which the public expected America would soon become metric. The public knew that legislation was passed. Newspapers of the time period announced metric values of temperature to safely cook pork. One supermarket boasted it was adopting metric. Local ladies clubs in the midwest had meetings where speakers told them what to expect in the metric transition. Collector columnist Cora Wright wrote on April 15, 1977 in the *Delaware County Daily Times* (Primos, PA):

> A collector with foresight keeps an eye on lifestyle changes and anticipates the collectables of the future. For instance, with the metric system coming as the American standard a collector might start now to collect present day measuring devices such as rulers, spoons and cups, or any other measures we take for granted now.

Well known advice columnist Abigail Van Buren, who wrote a column called *Dear Abby*, responded to an anti-metric person on November 8, 1977 thus:

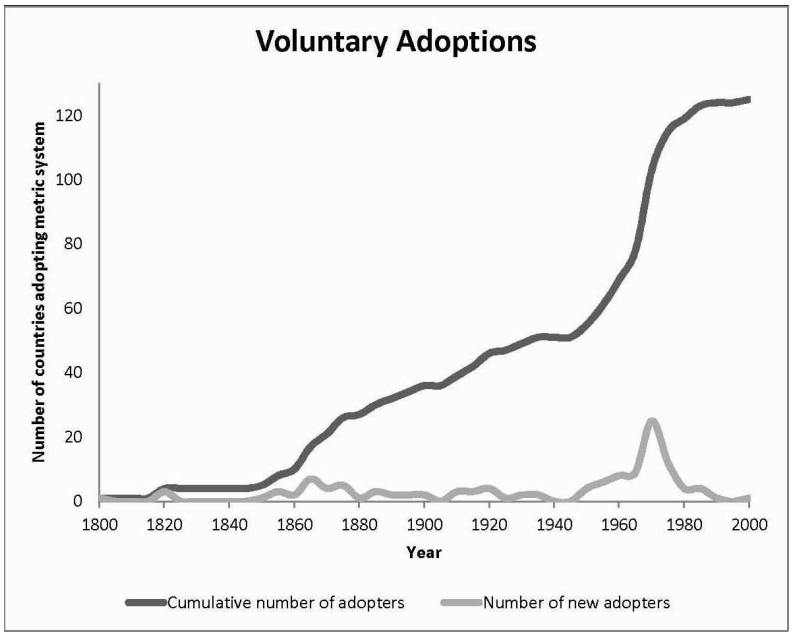

Figure 7.1: *The Social Life of Measures: Metrication in the United States and Mexico, 1789-2004* Hector Vera 2001

> DEAR MAD: Sorry oldtimer, but the United States is the ONLY major nation in the world still clinging to pounds, inches, gallons and acres. The whole world is adopting the metric system of weights and measures. And the benefits to this country of promoting an "international language of measurements" are too numerous to detail here.

A multipart series called *An Everyday Guide to the Metric System* appeared in newspapers across the country at the beginning of 1977.

On September 17, 1977, the only known NCAA metric football game in America took place between St. Olaf and Carleton Colleges in Northfield Minnesota at Laird Stadium. The game was proposed by Jerry Mohrig, a Chemistry Professor at Carleton College. This was precipitated by Jerry's son, who noticed that sports such as swimming and track were going metric–perhaps a metric football game might be good.

The NCAA had to grant permission for the game to take place–and did–after working out how to convert the statistics back to US measures. The major concern was that with a longer field, it was possible to have a runback for a touchdown that was longer than on a non-metric field. The field was 100 meters long by 50 meters wide with 10 meter end zones.

The game is remembered fondly for the esprit de corp it created among the student body. Metric puns were to be found everywhere. During halftime, special guests included General Ulysses S. Gram, skier Jean-Claude Kilo and baseball legend Harmon Kilogram. The half-time show featured *Misty Meters and her Hectoliters.* The game was dubbed *The Liter Bowl.* Almost 10,000 people showed up to watch the Metric Football game. The game was broadcast on KYMN radio. Unfortunately it was a 43-0 defeat for Carleton. St. Olaf gained 302 meters in "meterage." Carleton had 106 meters in total offense.

The public seemed to be preparing itself for the coming of metric in the US, even as the government and industry was not. The rest of the world was becoming metric at a mad pace, surely "metric was inevitable" in the United States. Everything was in place except an enforceable government initiative.

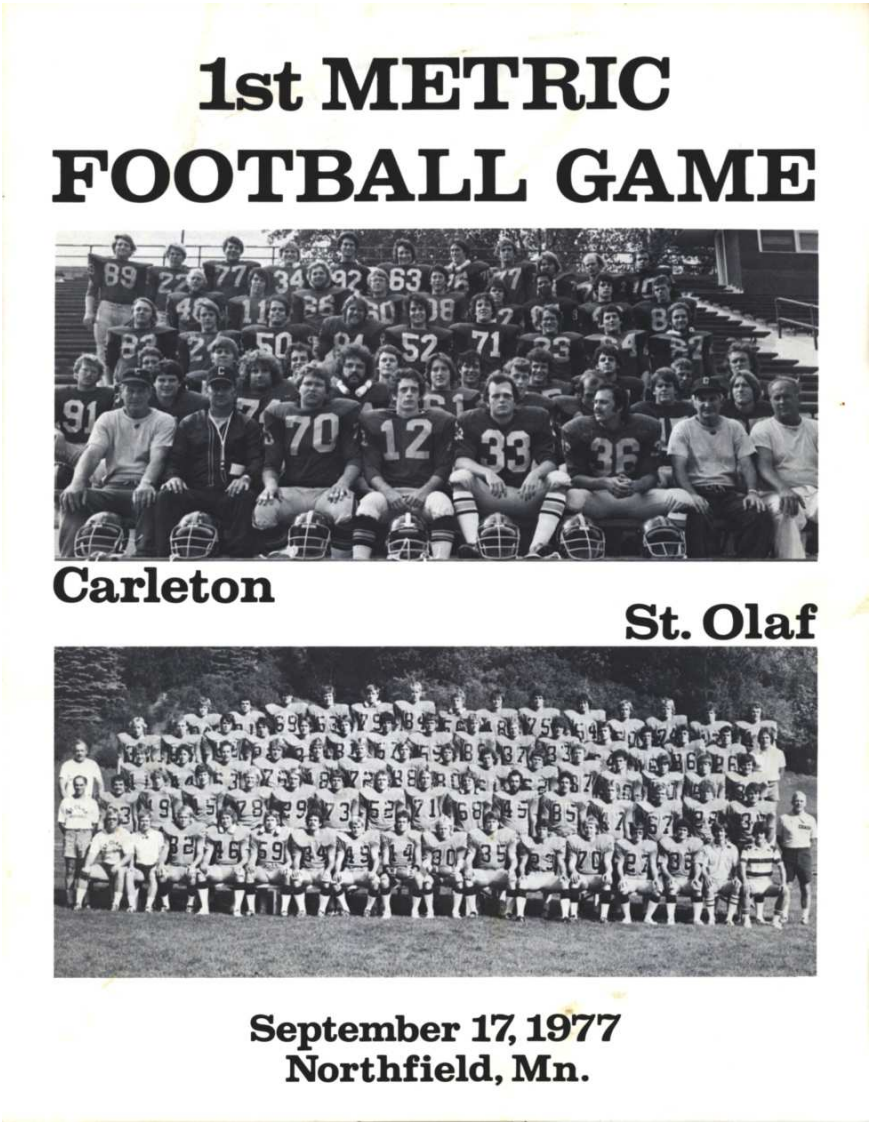

Figure 7.2: Cover of a program from the only NCAA sanctioned Metric Football game, played in Northfield Minnesota on September 17, 1977. Courtesy of Jeff M Sauve, Northfield Historical Society.

References

[1] "Partnership In Technology Urged by President Nixon" *Sarasota Herald-Tribune* (AP) March 17, 1972

[2] "U.S. Slowly Converts to Metric System" (AP) *Sarasota Herald-Tribune* January 17, 1977

[3] Foster, Bruce "Make Mine Metric " *Beaver County (PA.) Times-Common Cents* Sunday, August 5, 1979