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Illinois State Fair 8/23/92 [OA 7578]

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THE WHITE HOUSE

Office of the Press Secretary  
(Springfield, Illinois)

For Immediate Release

August 23, 1992

REMARKS BY THE PRESIDENT  
TO THE SPRINGFIELD COMMUNITY

Illinois State Fairgrounds  
Springfield, Illinois

1:07 P.M. CDT

THE PRESIDENT: Thank you, thank you. (Applause.) Thank you, Jim Edgar. You in Illinois are lucky to have Jim Edgar and Brenda here in Springfield, I'll tell you. (Applause.) And, of course, I'm very pleased that Illinois' own, Ed Madigan, is our Secretary of Agriculture. He understands it and he's doing a great job. (Applause.)

May I salute Bob Kustra, the Lieutenant Governor, and his wife Kathy; and old friend of mine, the Secretary of State George Ryan, and Lura Lynn. George has been at my side through a lot of political battles, and I'm very grateful to him. May I salute a good member of Congress -- if we had more like him we wouldn't need to clean House. I'm talking about Representative Thomas Ewing here. (Applause.)

And two others that I want to single out because as we talk about change, real change to help this country, we've got to change the Clinton-Gore gridlocked Congress. We've got to change it. (Applause.) And in Rich Williamson running for the Senate we have a man that can do just exactly that. He's with you on the values, he's with us on taxing less and spending less. He's with us on the fundamentals, and we must have him in the United States Senate. (Applause.)

And I want to see John Shimkus elected from the 20th District. (Applause.)

I am going to do what Harry Truman did. In this campaign, no, it's not give 'em hell, but they're going to think it's hell when I get through with them. But here's what it is. (Applause.) Look, I'll tell you why I'm going to do it this way. For months, I've held out my hand to the Congress only to have it bitten off. And now I am starting right here in Illinois. The Congressman from this district voted against us on Desert Storm. He tried to bring legal papers against me. He is against the balanced budget amendment. And I want John Shimkus to replace him in the United States Congress. (Applause.)

We've had it. We've had it with this gridlocked Congress. The American people have told Barbara and me, here are our values. And they've said -- agreed with me in the election -- here's what we want to do. And it hasn't worked because the Congress blocks us at every turn. You've got to turn out these -- no matter how nice they are, how kind they talk about the farmer when they come back here, look at the record. Don't let them talk one way in Illinois and vote differently in Washington, D.C. (Applause.)

And let me just say it is really great to be back in Springfield. Lincoln, you recall -- Abraham, that is -- said of this -- he said, "To this place and the kindness of these people I owe everything." I think he had good taste in political parties. I think he had great taste in hometowns. (Applause.)

MORE

And, as you know -- you know, until Houston I stayed out of the actual political arena, and I stayed out of it because I was trying to get some things done to bring tax relief, incentives for the first-time homebuyer, investment tax allowance, reduction in capital gains, trying to get those done for the farmer and for the American people. (Applause.)

But I felt like one of those corndogs at the fair -- skewered by the Democratic opposition for nine months. And that's changing -- it changed as of Houston and it's going to change for every single of the remaining 73 days. (Applause.)

You know, we've had dramatic change. I see these kids here. And you do not hear a word about this from the Democratic Convention. Don't you think it's a wonderful thing that these young kids go to bed at night without the same fear of nuclear war that the generations precedent had? (Applause.) This is big. This is important.

So we've got our priorities. And one of them affects every single Illinois farmer -- we must open markets abroad. We will get a GATT agreement. We've gotten a NAFTA agreement. And we cannot go for protection. (Applause.)

One fact: One-third of the corn and soybeans grown in Illinois head for markets outside the United States. And if we can get that playing field level, if we get access to foreign markets, it means bonanza for the farmers in this country. They can outproduce anybody, outhustle them, outwork them. (Applause.) And so, open trade, free trade without apology is what I believe in and the case I'm taking to the American people. Illinois farmers and workers feel that the government takes too much and gives too little. And so, when next year Congress comes back in, I pledge a dramatic new effort to slash federal spending and then get these taxes down. (Applause.)

Listen to the opponents on this one. It's wonderful, new --

AUDIENCE: Clean House --

THE PRESIDENT: Yes, as soon as we get a Congress in that will do it. And I want to cut spending and taxes. And he accuses me of fearmongering? He's wrong. Capital gains is one right there. That's a good place to start. Get the income taxes down. And if you'll excuse me one political comment -- I have a message for Governor Clinton: Americans aren't afraid of cutting spending and lowering taxes. They fear most of all a rubber-stamp president that will rubber-stamp this spendthrift Congress. (Applause.) So there. We're not going to let that nightmare happen.

You know, I think that you all understand perhaps as well as any in America -- certainly is true in rural America -- the values, what we're talking about when we talk about family values. And here we learn that the family is there to teach us right from wrong, to lend a helping hand to a neighbor, respect for the law, hold out your hand to help somebody else, wipe a tear away when something goes wrong.

Now, Barbara and I try to impart these values to our kids and grandkids. And I have great respect for what she has done, helping with literacy, helping other Americans to have a better life. (Applause.)

You know, today the American family is under attack, and we've got to defend it, because it is the foundation of our nature. (Applause.) And that is why, when we cut government spending I will fight for an increase in the personal income tax exemption so more Americans can afford to build and strengthen their families. (Applause.)

MORE

We're going to reform the welfare program to encourage families to stick together and have fathers stick around and do what they ought to do. (Applause.)

I see the signs out here of the teachers -- God bless those people that teach our young people. (Applause.) And we have proposed the most far-reaching reform in American education in a century, and with a new Congress we will get it passed. We need to reform education, support the teachers and be sure these kids can grow up in a competitive world number one. (Applause.)

And I'll give you another idea why I want to change this Congress. I mentioned it in Houston. We are suing each other too much and caring for each other too little. (Applause.) And we have been trying for three years to reform the legal liability laws so that you don't have these excessive suits that drive doctors out of medicine, drive Little League coaches out of Little League. Locked in that gridlocked Congress by Bill Clinton and the liberal leadership in Washington. We've got to change it. We have got to change that gridlocked Congress. We've got to clean House. (Applause.)

Let me just say in conclusion, two years ago I made, I think, the toughest decision that a President can make, and that is to send America's sons and daughters into battle -- the sons and daughters of Illinois and every other state; fought against aggression; fought to keep a people free; fought to prevent the Mideast from becoming a nuclear powder keg. And now they have come home, and this election, like every other is about making an America that they can be proud of. An America we all can be proud of -- good jobs, safe streets and strong families. (Applause.)

And so I ask your support not to change for the sake of change, but to change America to make it more secure, more safe, more promising to every young person here today.

May God bless you all. And thank you for this fantastic rally. I am so proud to be back. (Applause.) Four more! (Applause.)

END

1:20 P.M. CDT



202/456-6218

OFFICE OF  
PRESIDENTIAL ADVANCE  
**COVER PAGE**

TO: JENNIFER GROSSMAN

FROM: ED COWLING, SPRINGFIELD, IL

TOTAL NUMBER OF PAGES: 33  
(including cover page)

DATE: 8/21/92

TIME: 10:40

MESSAGE:

MATERIAL RECEIVED FROM THE

ILLINOIS CORN GROWERS ASSOC.

RE: ETHANOL. I ALSO HAVE @ 50 PAGE

PROTOCOL (HIGHLY TECHNICAL) FOR THEIR

STUDY WHICH I'M NOT SENDING.

IF YOU HAVE ANY QUESTIONS OR PROBLEMS WITH THE TRANSMISSION PLEASE CALL.

TELEPHONE NUMBER: \_\_\_\_\_



**ILLINOIS  
CORN  
GROWERS  
ASSOCIATION**

P.O. Box 1623 Bloomington, Illinois 61702-1623 Ph. (309) 557-3257

August, 1992

**TO WHOM IT MAY CONCERN:**

The Illinois Corn Growers Association is committed to pursuing the additional scientific information needed to allow ethanol to participate in the reformulated gasoline program. We strongly believe ethanol will improve the environment, move our nation toward renewable fuels and away from petroleum based fuels, and improve the economy of both rural and urban areas throughout the U.S.

Enclosed are the Final Reports on an ethanol blended gasolines's effect on the Chicago Airshed. This work demonstrates ethanol when blended with gasoline will not exacerbate ozone pollution even though the Reid vapor pressure increases, thus volatile organic compounds increase. This compensation effect occurs due to the higher oxygen content and lower reactivity of the VOC's emissions of ethanol blend gasoline.

We hope you find this information helpful, and feel free to call on us as you have questions.

Sincerely,

**ILLINOIS CORN GROWERS ASSOCIATION**

**Scott Durbin  
President**

SD:ah

Enclosures



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## OVERVIEW OF ETHANOL IMPACT ON OZONE IN CHICAGO REGION IN 1995

The Illinois Corn Growers Association initiated this project to provide the needed scientifically based information to enable ethanol to play a role in reformulated gasoline (RFG). The U.S. EPA has proposed rules that, if implemented, will inhibit ethanol's participation in RFG which could potentially eliminate the ethanol industry after the turn of the century. The Chicago region in 1995 is modeled using the latest urban airshed model (UAM-V) which minimizes the impact of pollutants transported from other areas through the use of nested grids. (see attachments A and B) A nested grid system is defined as having a finer grid within a coarser grid which enables data on emissions to flow via weather patterns throughout the entire modeled area. The finer grid system is capable of much more detail and depicts the activity of the non attainment area. There were some 20,000 grid cells used, including 7 vertical layers. The emissions originating and flowing into and out of each grid are simulated; photochemical reactions and ozone formation are computed. To provide the meteorological conditions of an ozone episode, 21-22 July, 1987 was chosen as it is the best currently available data from the ongoing Lake Michigan Oxidant Study (LMOS). Emissions data for this study compared a 10% ethanol blend with an 11% methyl tertiary butyl ether (MTBE) blend which meets the proposed (RFG) requirements with regard to volatility and oxygen.

### Results

The study, to date, shows that although there is an increase in evaporative volatile organic compounds (VOC) when gasoline and ethanol are blended, there is a minute increase in ozone when ethanol is compared to MTBE. The study indicated ethanol's increase in ozone pollution, when compared to MTBE, was .0001 parts per million (ppm), a number which is scientifically insignificant. The standard for attainment is 0.12 ppm so the simulated increase of 0.0001 ppm represents less than 0.1 percent.

A 10% ethanol blend contains 75% more oxygen than an 11% MTBE blend. The Chicago UAM-V demonstrates that this extra oxygen compensates for the increased evaporative VOC emissions due to the net of the three following benefits:

1. Carbon monoxide (CO) emissions, an ozone precursor, are reduced by the additional oxygen in the fuel. The 75% more oxygen that the ethanol contains causes an even larger reduction in CO than the MTBE blend.
2. In addition, the increased oxygen in the ethanol blended gasoline reduces the exhaust VOC emissions which are more reactive in forming ozone than the evaporative VOC emissions increased by the ethanol blended gasoline.

3. Even though evaporative VOC emissions are higher from an ethanol blended gasoline, they are lower in reactivity than the evaporative emissions of the original gasoline. The 10% ethanol (low reactivity) dilutes the high boiling fraction which contains the most reactive aromatics.

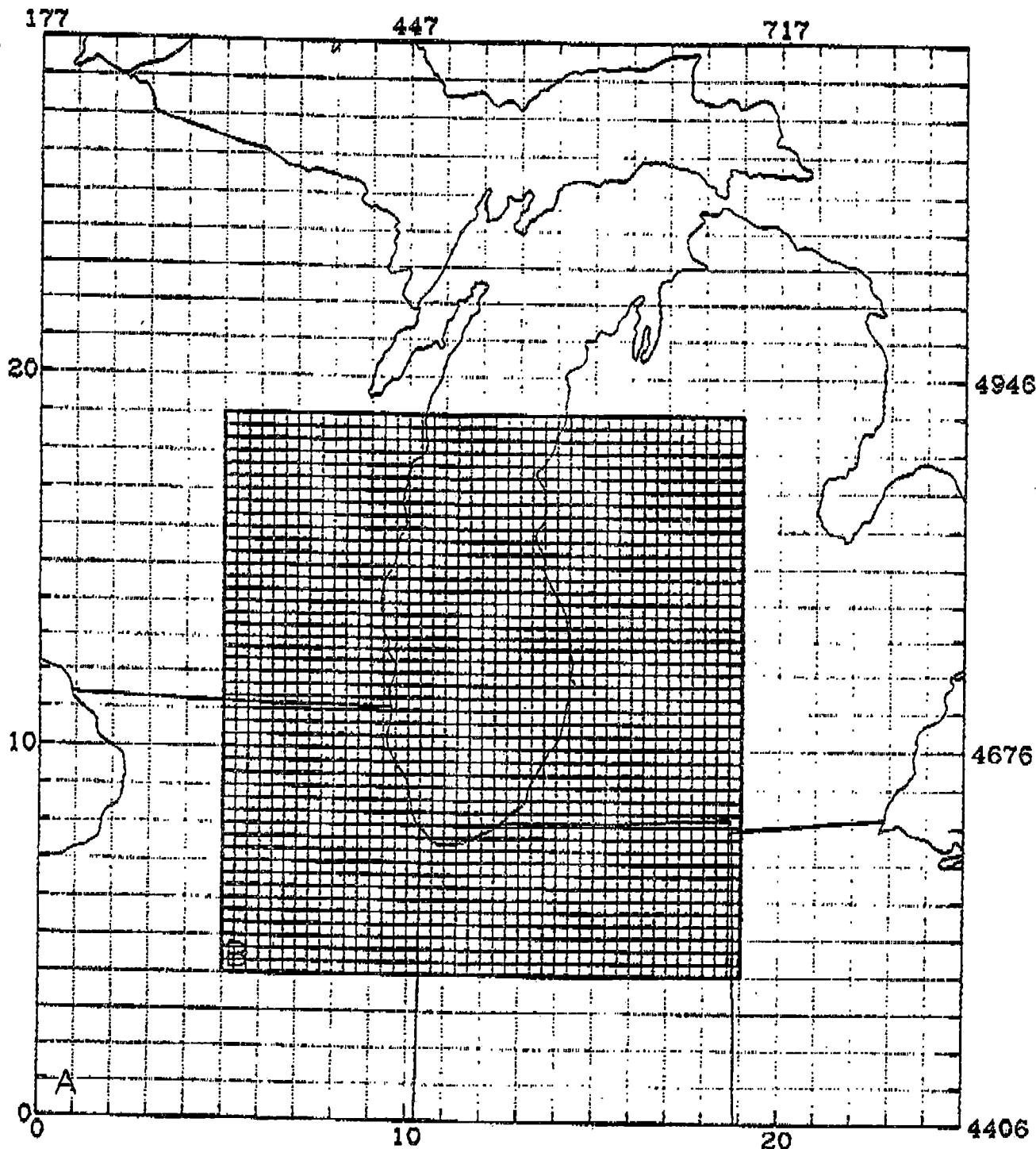
The sum of these three benefits offsets ethanol blend's increase in mass VOC emissions causing a minute net increase in ozone formation.

### Conclusion

The results of this study clearly call into question the U.S. EPA's proposed rules for reformulated gasoline which focuses on Reid vapor pressure (rvp) as the test method to be used in determining the ozone forming potential of VOC's of a given fuel. Where rvp is a good, easily regulated method to test all hydrocarbon based fuels, it does not take into account all the benefits of ethanol blended reformulated gasolines. This study also demonstrates that all VOC's are not created equally in their ozone forming potential. It is clear that regulating mass VOC emissions without consideration of reactivity may cause the full benefits of the Clean Air Act Amendments to be unrealized.

The Illinois Corn Growers Association believes that the results of this study, to date, should be carefully reviewed by the U.S. EPA. ICGA will request a regulation granting ethanol a 1 pound per square inch rvp waiver for reformulated gasoline to also be applied to VOC reduction requirements. This will assure fair treatment of ethanol in the Clean Air Act.

ATTACHMENT A

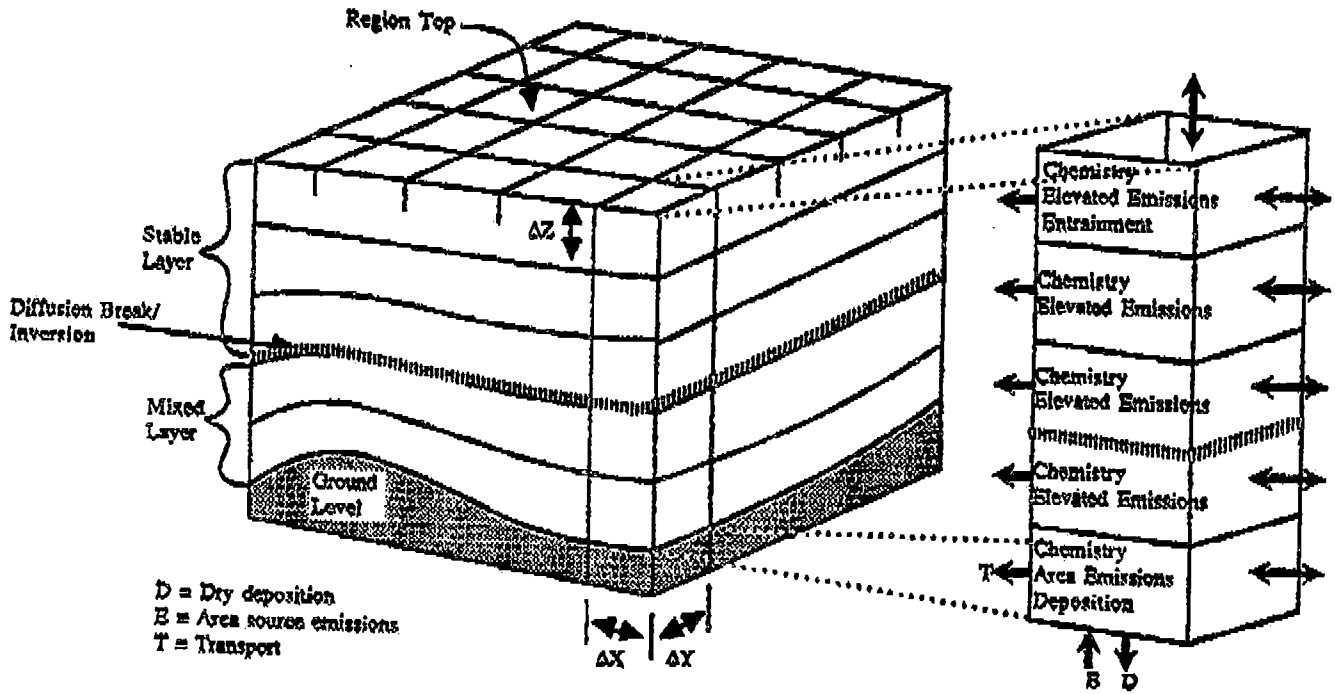


A: (177,4406) 25x29 27KM CELLS  
B: (312,4514) 42x45 9KM CELLS

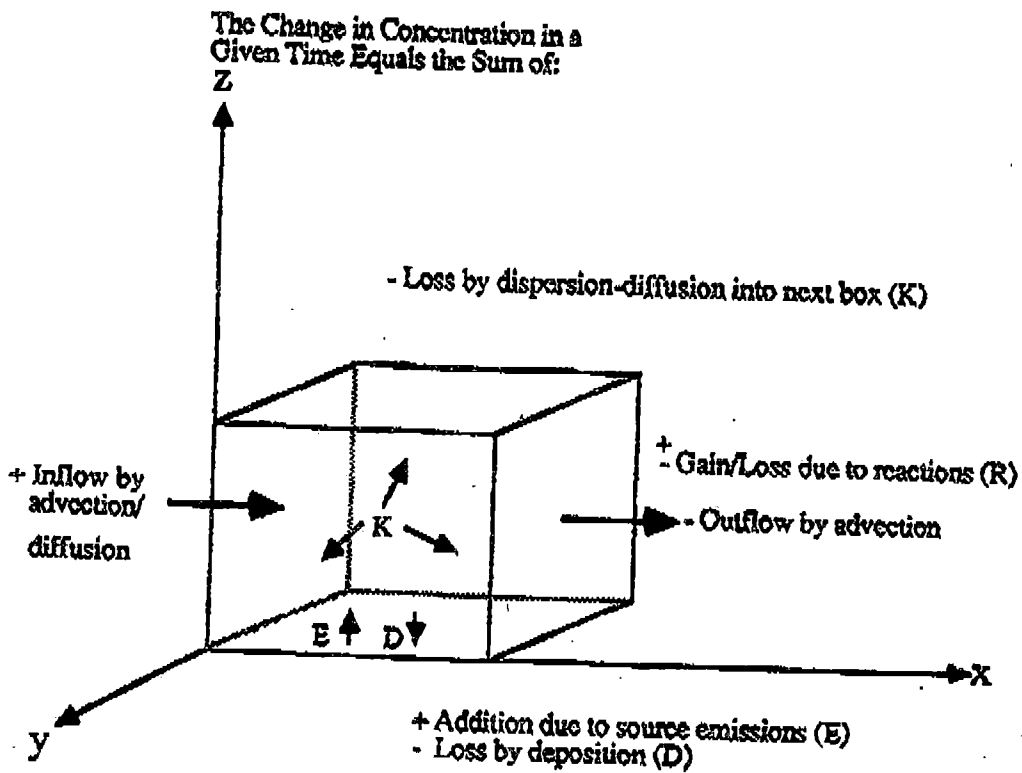
FIGURE 1. UAM-V modeling domain for the July 1987 ozone episode in the Chicago region.

Attachment B

### Grid model Structure of the Urban Airshed Model



### Mass Balance for a Stationary Incremental Volume in a Grid Analysis



**Final Report**

**COMPARISON OF THE AIR QUALITY EFFECTS  
OF ETHANOL AND MTBE IN REFORMULATED  
GASOLINE IN THE CHICAGO REGION IN 1995**

**Volume 2: Results**

**SYSAPP-92/086b**

**July 29, 1992**

**Prepared for**

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## 1 INTRODUCTION

Volume 1 of this report includes the modeling protocol used in this study, and compares it with the publicly available information on the protocol used in the Auto/Oil Air Quality Improvement Research Program (AQIRP) modeling evaluation of ethanol blends. This volume presents the results of a modeling study of the impacts on air quality of using ethanol blends in reformulated gasoline (RFG) in the Chicago region for the year in 1995. The purpose of this modeling study was to determine whether the higher oxygen content of a 10 percent ethanol/RFG blend, when compared to an 11 percent MTBE/RFG blend, can compensate for the higher volatility of the ethanol/RFG blend. The latest version of the Urban Airshed Model (UAM-V) was used to estimate the extent of this compensation in the Chicago region in 1995. The results show a very small ozone increase ( $<0.0001$  ppm) over that of the MTBE blend applied to the same simulation scenario. Evidence is given to support what appears to be compensation of the higher volatility of the ethanol blend by the extra available oxygen. Recommendations to help resolve some remaining uncertainties are given at the conclusion of this volume.

Where information has been made available in the public domain, we discuss the AQIRP results in relation to those generated by this study. An attempt is made to understand and explain the differences that exist between these two studies.

## 2 RESULTS

A detailed description of the objective and protocol for this study is presented in Volume 1 of this report. An overview is provided in this section for continuity.

The recent Clean Air Act Amendments (CAAA) and subsequent regulation negotiations ("Reg Neg") have left the ethanol industry facing a need to meet lower volatility requirements than is obtained by merely adding ethanol to a clear gasoline can easily meet. Such splash-blending of ethanol is acknowledged to increase Reid vapor pressure (RVP) by about 1.0 psi, but RFG regulations, as proposed in EPA's Simple Model for RFG in 1995 and 1996, would require reduced RVP gasolines in order to comply with the VOC performance standards of the RFG program, without considering the oxygen content of the gasoline. However, the oxygen content of the common 10 percent blend of ethanol exceeds the minimum RFG oxygen requirement by 75 percent. Hence, the object of this study is to evaluate the ozone impact from a 10 percent ethanol/RFG blend even though the volatility requirement is not met.

As a test case the Chicago region in 1995 is modeled using the latest urban airshed model (UAM-V) which minimizes the impact of pollutants transported from other areas through the use of nested grids. To provide the meteorological conditions of an ozone episode, the event of 21-22 July 1987 was chosen as it is the best currently available from the ongoing Lake Michigan Ozone Study (LMOS). Emissions for the test case were constructed so as to compare the 10 percent ethanol blend with an 11 percent MTBE blend which meets the proposed RFG requirements with regard to volatility and oxygen. It was assumed that either oxygenate would be splash-blended from the same pre-RFG clear gasoline. This assumption was made to minimize possible uncertainties generated by variations in refinery blending techniques.

Emission inventories used to compare the two blends were constructed as follows:

1. With regard to mass emissions

To the extent possible mass emissions were obtained from the latest version of EPA's MOBILE model (MOBILE 4.1).

Since the effects of oxygen on the mass emission rates of exhaust VOC and NO<sub>x</sub> are not included in MOBILE 4.1, EPA recommended values were utilized for VOCs in this case. Similarly, EPA recommendations were followed to obtain the mass emissions of NO<sub>x</sub> as effected by oxygen (see Volume 1, Appendix B).

2. With regard to species profiles

For the ethanol blend scenario, the AQIRP species profile data was used for all vehicles equipped with 3-way catalyst technology, and for all vehicles whose evaporative emissions were equal to or below the level measured and used in the AQIRP study. (The AQIRP data base has exhaust and evaporative species profiles for cars with 3-way catalyst technology using an ethanol blend, fuel W). This fuel is close to RFG specifications for aromatics and has an RVP approximately 1 psi higher than might be required for Chicago in 1995.)

Evaporative emissions above the AQIRP levels for either carbureted or fuel-injected cars were speciated with the running loss profile from the AQIRP data base, as were the running loss emissions.

Exhaust emissions from non-catalyst cars and those using the open-loop technologies were speciated utilizing the EPA default profile as modified to account for the presence of ethanol. This modification followed an EPA recommendation as presented in Volume 1, Appendix C.

All species profiles for the MTBE scenario were constructed utilizing the same profiles as those for the ethanol-blend, modified as per the EPA memorandum contained in Volume 1, Appendix C.

Due to the large amount of diverse data that results from a single UAM simulation, it has become common practice to present this post-processed material in selected tables and figures. This selection is only based on the need to provide the most succinct summary of results that will permit an objective interpretation to be made within the goals and framework of a specific study. Additional processing of the resulting data was required prior to presenting the results of this study due to the fact that we were using the recently developed UAM-V. For example, the outer grid cells of 27 Km size are not included in the presentation even though the emissions and photochemistry in this region was simulated. Likewise information only from the surface layer is presented here even though the six layers above the surface were simulated for the full two days. The decision, with regard to the presentation of the latter results, was based on the assessment that the material not presented did not affect the conclusions of the current study. Whether utilized or not, the full simulation results are available to those who would wish to examine them.

Figures 1 and 2 show isolines of the maximum ozone generated in each of the surface grid cells for the base MTBE scenario on the first and second (21 and 22 July 1995) days, respectively. The predicted maximum and minimum ozone concentrations occur in approximately the same locations on each day. The maxima are to the east of the city of Chicago over Lake Michigan and the minima are located southwest of the city. The minima are apparently due to a very large point source of  $\text{NO}_x$  emissions in this region. Although the predicted ozone peak on the second day is above the federal ozone standard of 120 ppb, the region exposed to concentrations above this level is small and it appears to be all offshore.

Due to the almost identical predicted results for the ethanol blend and MTBE blend scenarios, it was decided not to simply present, what would appear to be, duplicate figures for the two simulations. Rather, it was felt that the results of the ethanol scenario are more clearly presented as the differential change in the maximum ozone that occurs when one substitutes 10 percent ethanol for 11 percent MTBE (i.e., ethanol minus MTBE). This differential is presented in Figures 3 and 4. Isolines on these figures represent areas where the two scenarios give different results. The absence of isolines are areas where, to the resolution of the display of modeling results (0.1 ppb), the scenarios provide identical results. Considering the broader area of zero difference presented in Figure 3, it is appears clear that the first day distribution of maximum ozone concentrations is quite similar for both the ethanol and MTBE scenarios, with the primary differences occurring away from the area of highest absolute ozone concentration (see Figure 1). The second day impact of the ethanol blend, shown differentially in Figure 4, is very similar to the first day (as is that due to the MTBE blend), particularly in the Chicago region. The northwest region of the 9 km modeling domain shows a large area of positive maximum ozone differential (i.e. the impact on the maximum ozone concentration, when using the ethanol blend scenario, is 0.1 to 0.3 ppb higher than that due to the MTBE blend). However, as seen when examining Figure 2 this region is, once again, away from the areas of highest ozone concentrations; in fact, the simulated ozone peaks in the region of the highest differential impacts, due to the ethanol blend, are about one half of the peak maximum ozone concentration occurring in the entire modeling domain (approximately 60 ppb as compared to 120 ppb).

An extra simulation of the ethanol scenario was performed that was not specified in the protocol (see Volume 1). In this simulation we used the hourly distribution of running loss emissions due only to vehicle miles traveled (VMT) rather than the temperature-corrected hourly distribution prescribed in the protocol. Figures 5 and 6 present (for, respectively, the first and second simulation day) the differential impact on the maximum ozone concentrations when comparing these two ethanol scenarios. The hourly distributions for running losses for VMT, and those for VMT with the prescribed temperature correction are shown in Figure 7. The main effect of the temperature correction is to move the bulk of the running loss emissions to the afternoon commute hours (when temperatures are higher); the daily total of the emissions, in both cases, is identical. During the morning commute the gasoline tanks are cold, but for the afternoon

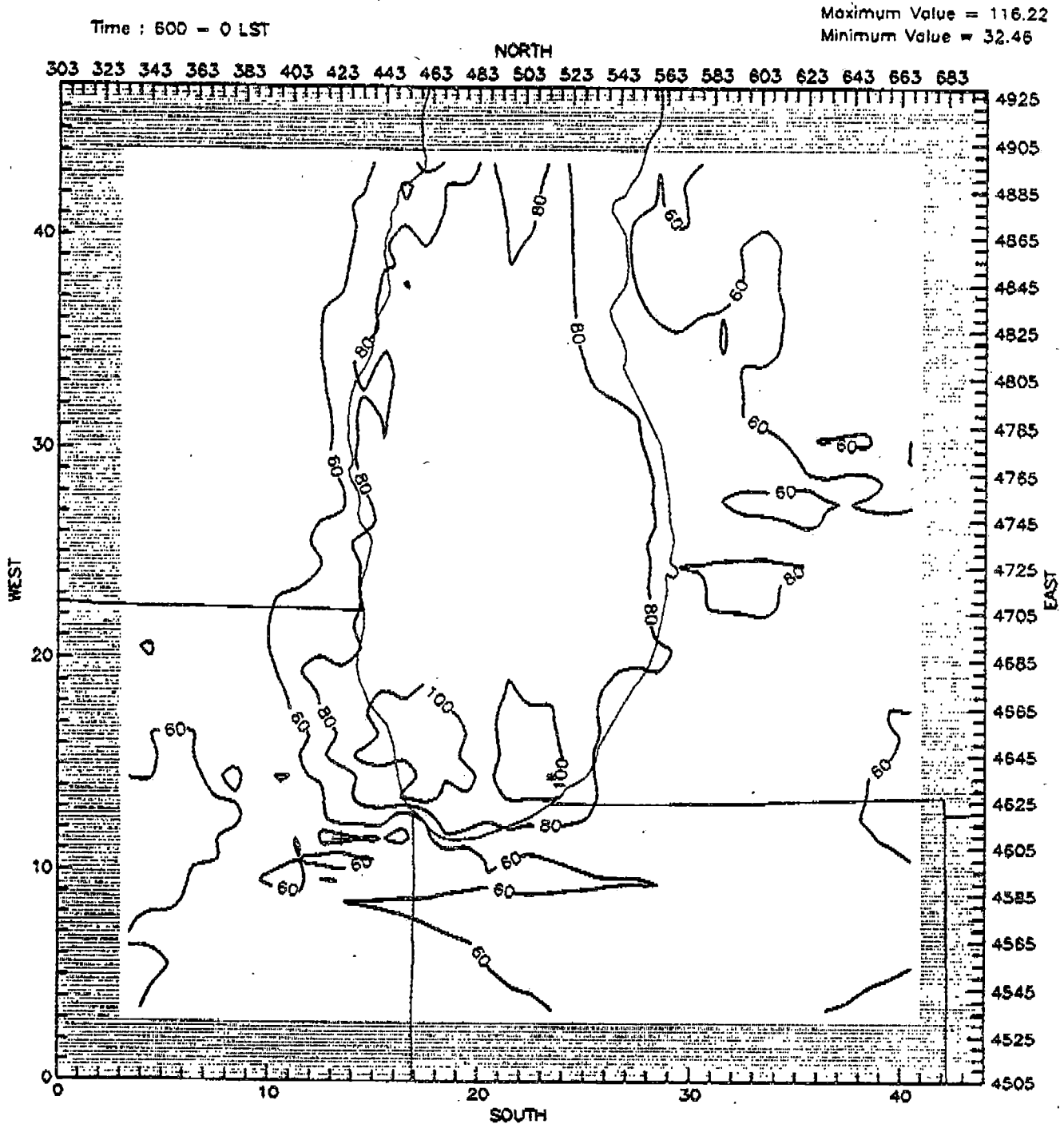


FIGURE 1. Maximum hourly ozone (ppb) predicted by the UAM-V for the MTBE scenario, 9 km grid on July 21, 1987 in the Lake Michigan region.

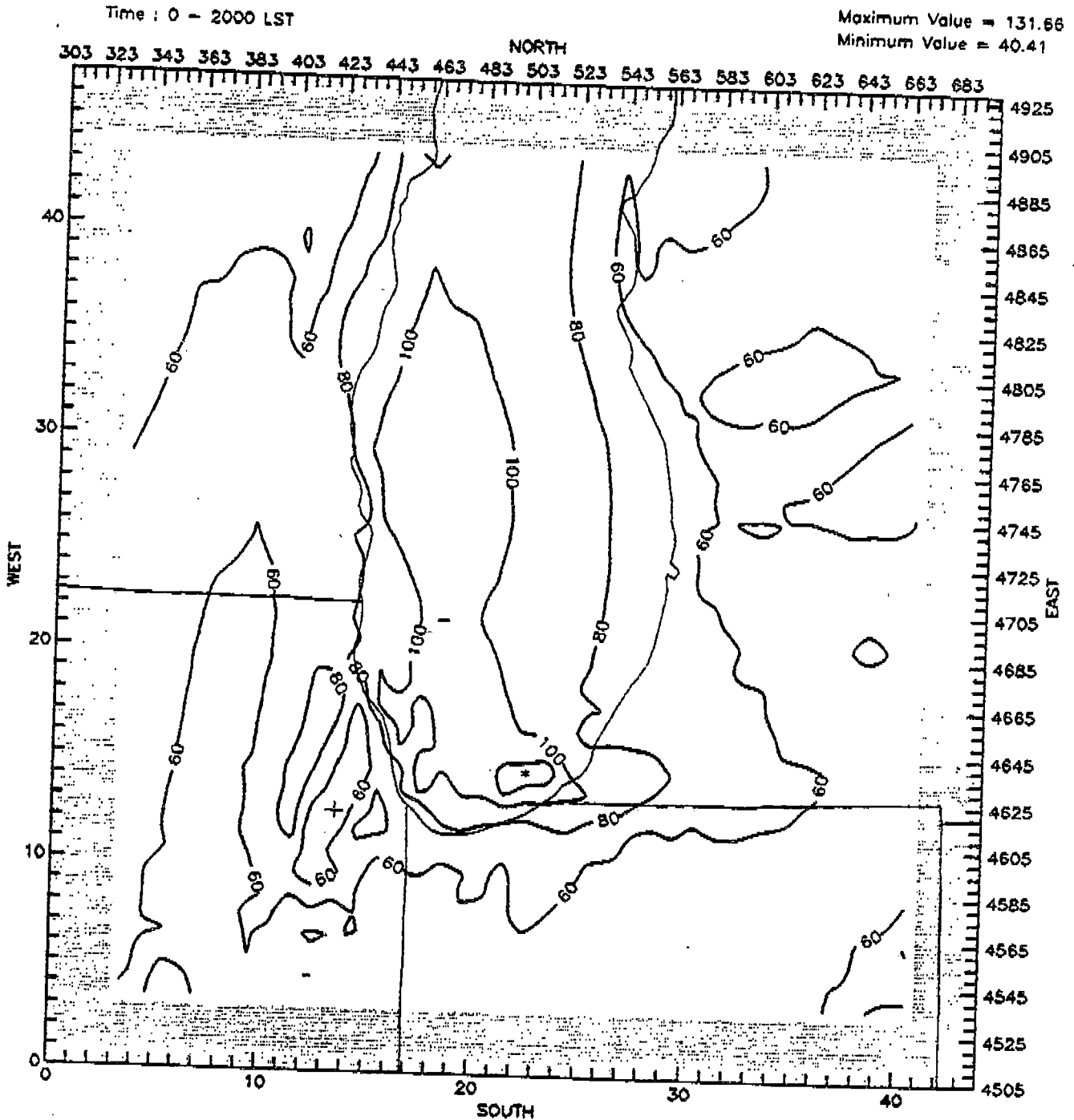


FIGURE 2. Maximum hourly ozone (ppb) predicted by the UAM-V for the MTBE scenario, 9 km grid on July 22, 1987 in the Lake Michigan region.

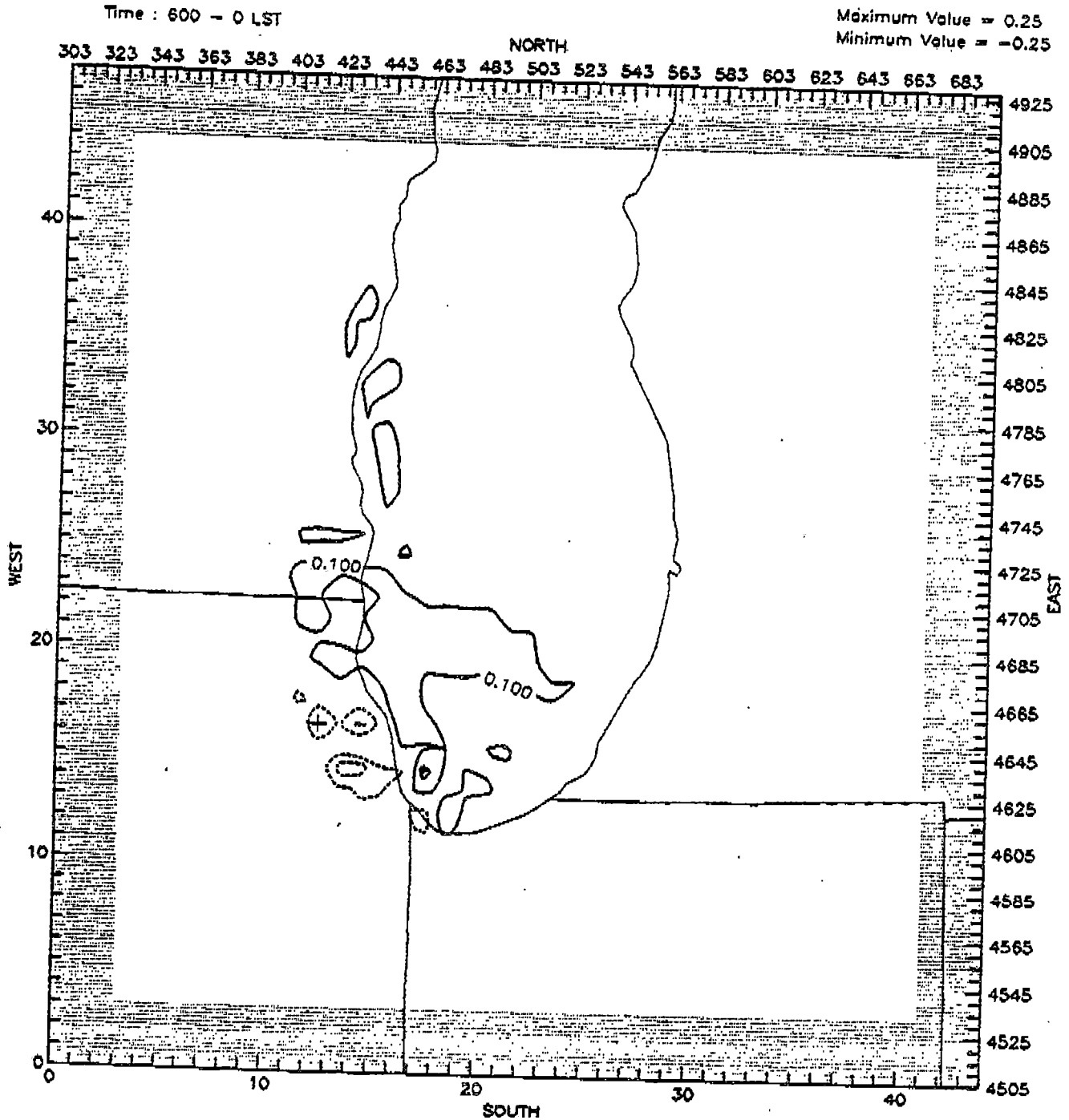


FIGURE 3. Difference in maximum hourly ozone (ppb) (Ethanol minus MTBE scenarios), 9 km grid on July 21, 1987 in the Lake Michigan region.

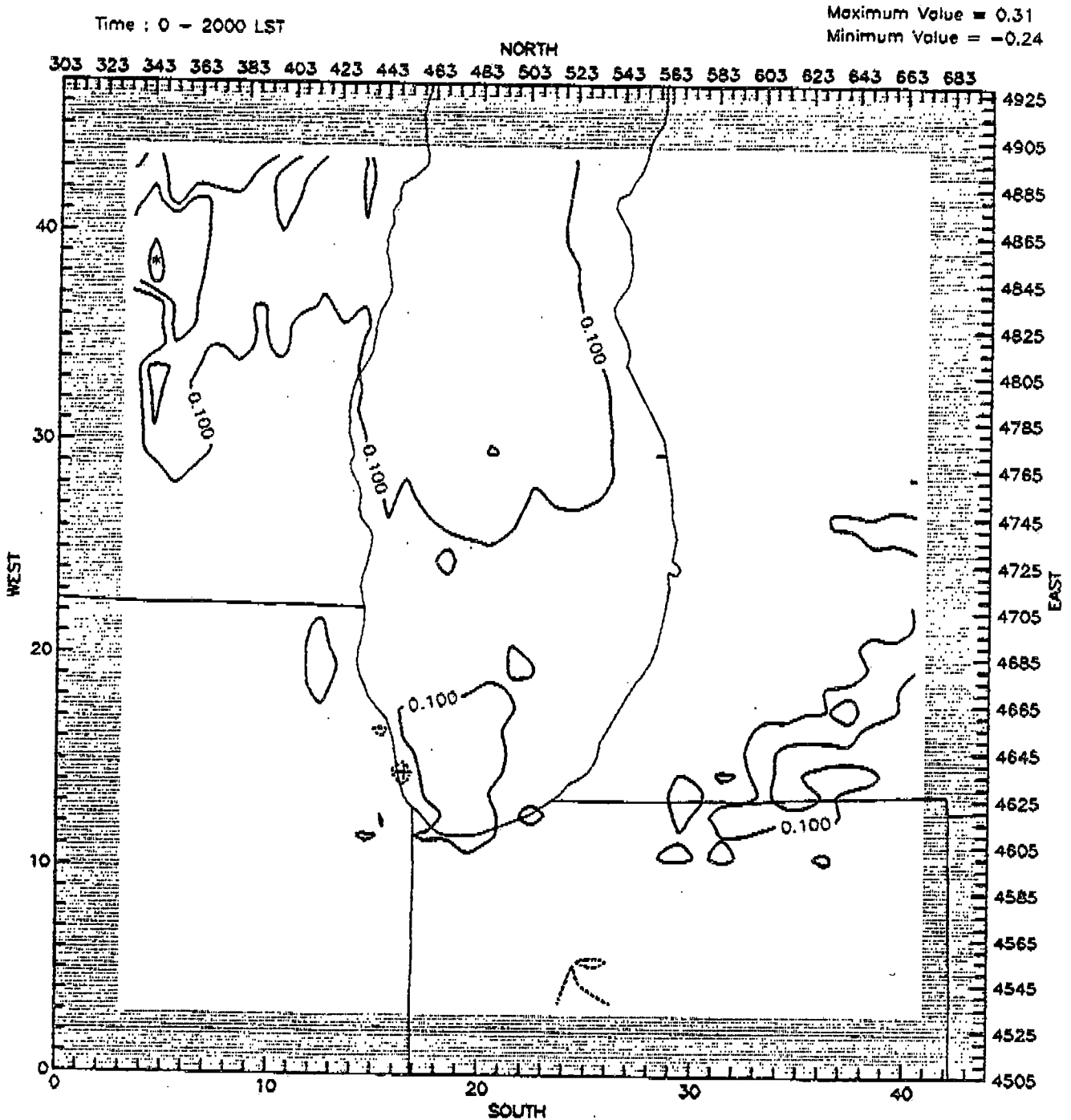


FIGURE 4. Difference in maximum hourly ozone (ppb) (Ethanol minus MTBE scenarios), 9 km grid on July 22, 1987 in the Lake Michigan Region.

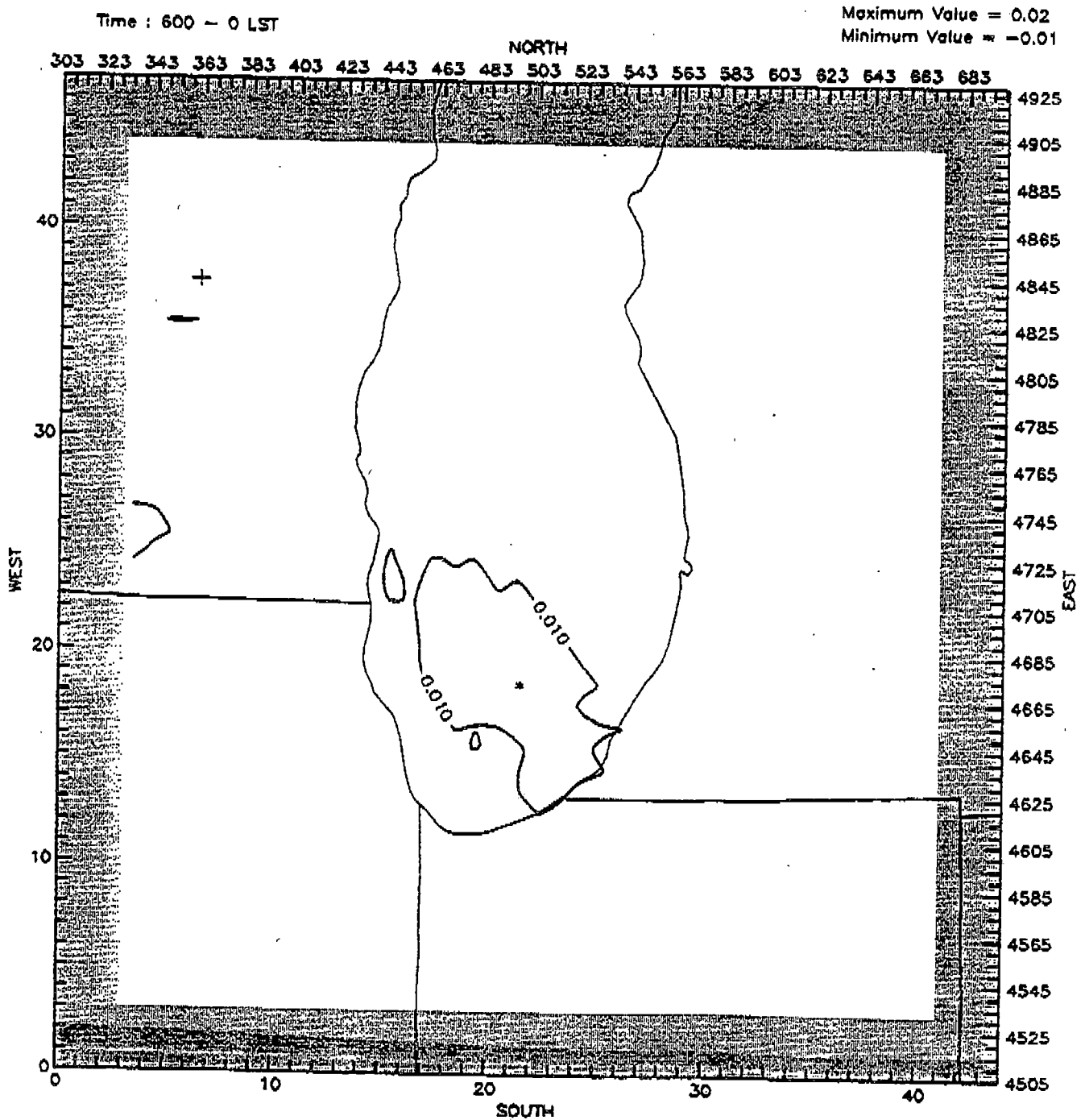


FIGURE 5. Maximum hourly ozone differences (pphm) between the UAM-V Ethanol and Ethanol III (VMT RL profile minus temperature-corrected RL profile) scenarios, 9 km grid on July 21, 1987 in the Lake Michigan region.

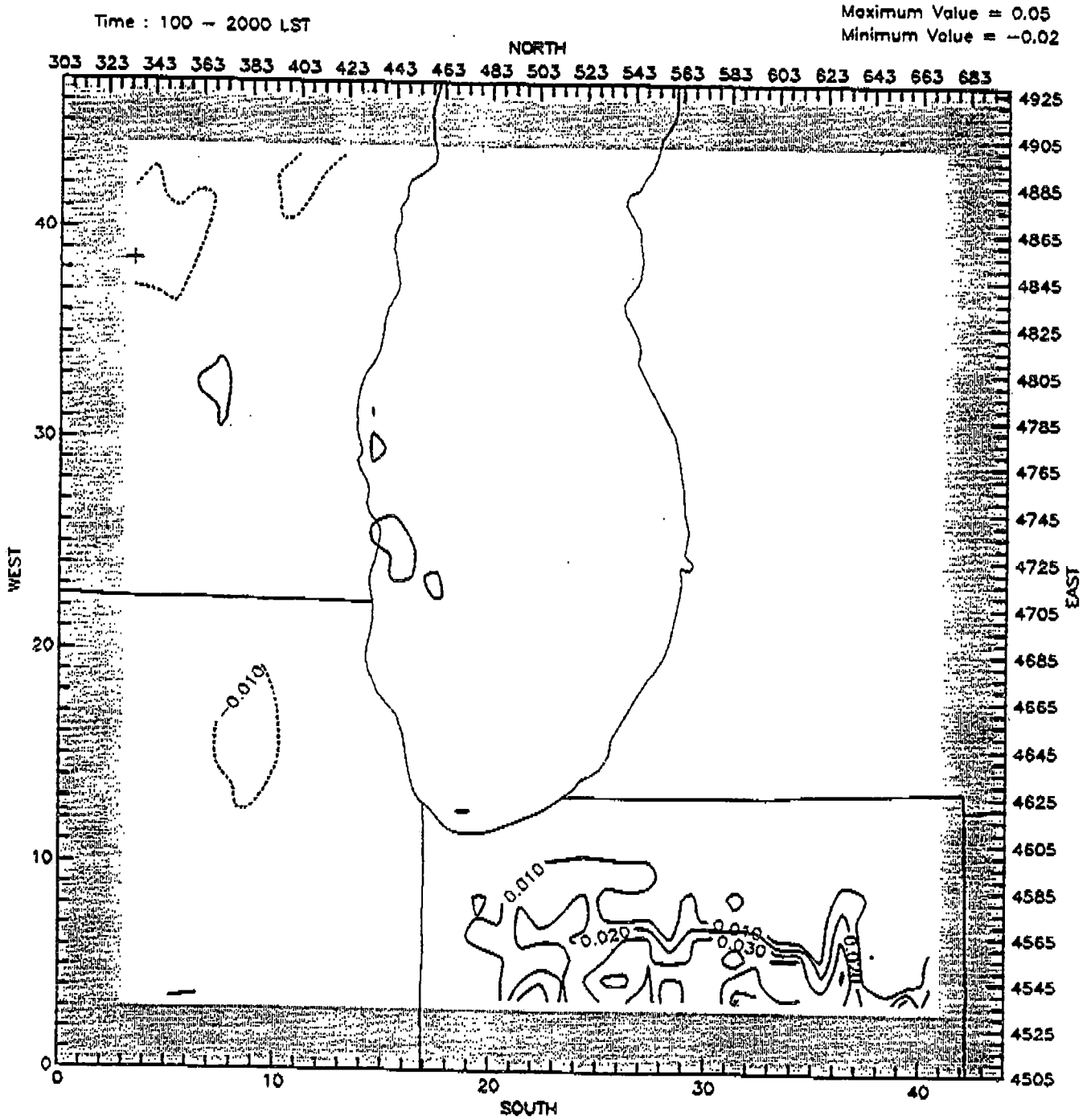


FIGURE 6. Maximum hourly ozone differences (pphm) between the UAM-V Ethanol and Ethanol III (VMT RL profile minus temperature-corrected RL profile) scenarios, 9 km grid on July 22, 1987 in the Lake Michigan region.

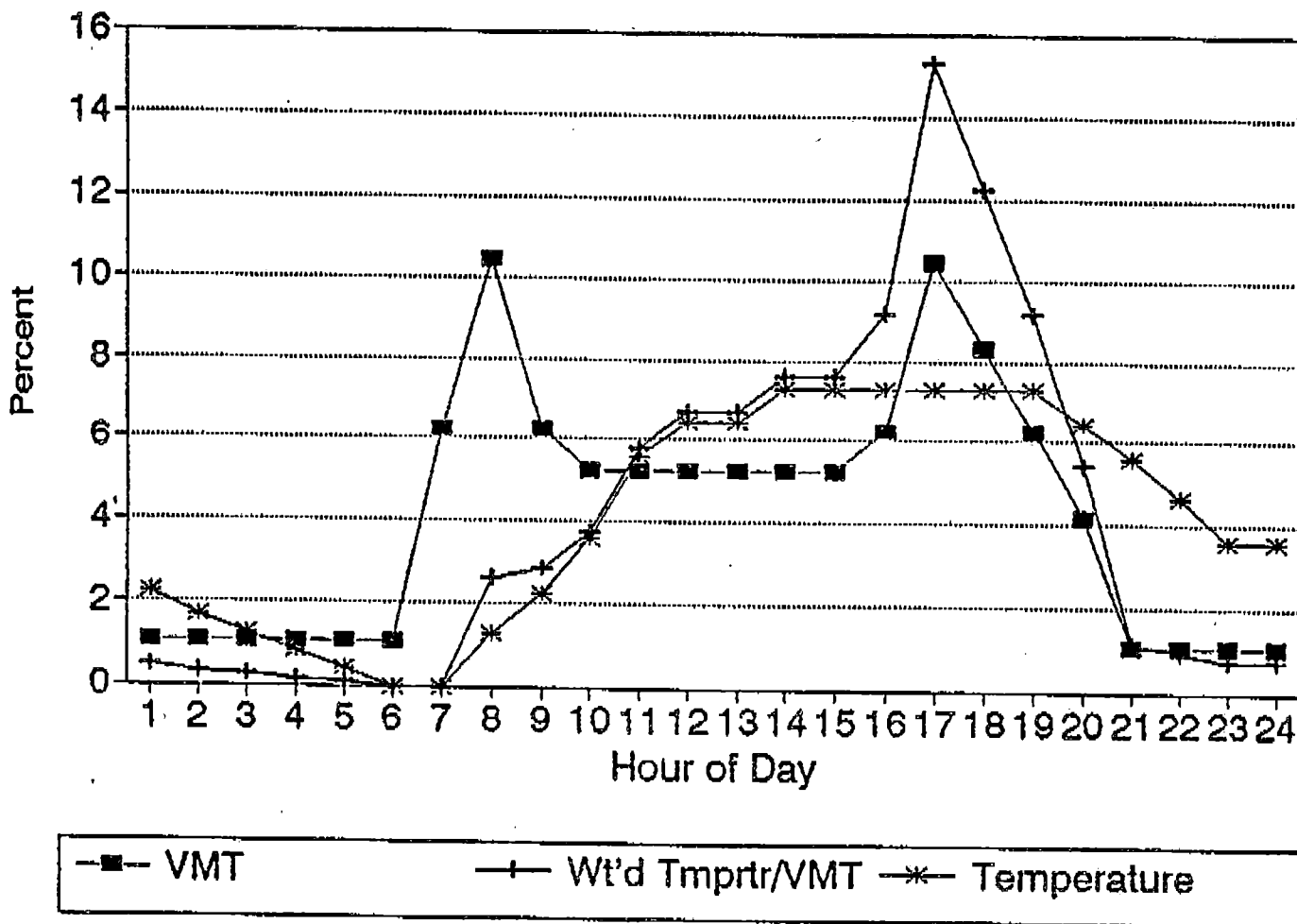


FIGURE 7. Alternative profiles for running loss emissions.

commute many vehicles have been sitting in the hot sun and the tanks become warm enough to enhance the running loss emissions. Figure 5 shows that the shift in running loss emissions alone can produce as large a differential impact on ozone concentrations as that produced, differentially, when comparing the MTBE and ethanol scenarios. That is, without the shift in emissions towards the afternoon commute hours, it would appear that the differential impact between ethanol and MTBE could be twice as high for this day for some areas in the lower Lake Michigan region. It should be noted, however, that the small region of the highest ozone peaks is barely affected by the shift in hourly distribution. Further, were one to differentially compare the MTBE scenario and the ethanol scenario, for this day, under identical running loss assumptions, essentially all of the additional effect of not taking the temperature correction into account would be eliminated. The point of interest is that the shift in the hourly distribution of one part of the emissions inventory can have a small impact on maximum ozone concentrations and their distribution, but the differential impact of using a 10 percent ethanol blend, as compared to an 11 percent MTBE blend, is also small and, in some areas, indeed of about the same magnitude.

The shifting of the running loss emissions toward the afternoon hours has a different effect on the second day of the simulation. Figure 6 shows that the northwest part of the region (downwind of Chicago) experiences some degree of ozone enhancement, but the southeast part of the grid contained in this figure, shows significant ozone decreases due to the shift in running loss emissions alone. This area of decrease, while it appears as the southeast portion of the fine resolution modeling grid presented in Figure 6, is actually immediately downwind (this second day) of metropolitan Indianapolis, whose emissions are included in the coarser grid, and are, therefore, part of the simulation. The evident shift in the wind pattern then, has resulted in a decreased ozone region (when considering temperature corrections for running losses) in an area that is now downwind of a major source of urban emissions. This reaction is similar to the reaction of the area immediately downwind of Chicago in the first day simulation (see Figure 5). It appears from this somewhat obtuse analysis, that the impact of shifting the running loss emissions to later in the day, to a degree, reduces the ozone on the day the specific emissions occurred, and appear to possibly increase the ozone formation on the second day in the area to which these emissions, or their residuals, were transported. The importance of this shift is discussed further in Section 3 below.

Another interesting pollutant to consider, from the standpoint of the impact of oxygenates in fuel, is carbon monoxide (CO). In the winter time CO, as a criteria pollutant, is of concern itself, and oxygenates are added to fuel to help reduce CO emissions from motor vehicles. During the warmer ozone season (summer time) CO can act as a precursor to ozone formation. If ethanol, whose oxygen content is higher than that of MTBE, reduces CO concentrations significantly in the regions impacted by increased VOC's that result from the higher volatility of ethanol blends, then the extra CO reduction can help compensate in part, for the ozone increases that might otherwise be expected. Figures 8 and 9 show the differential CO maximum concentration (cell by cell) distribution when

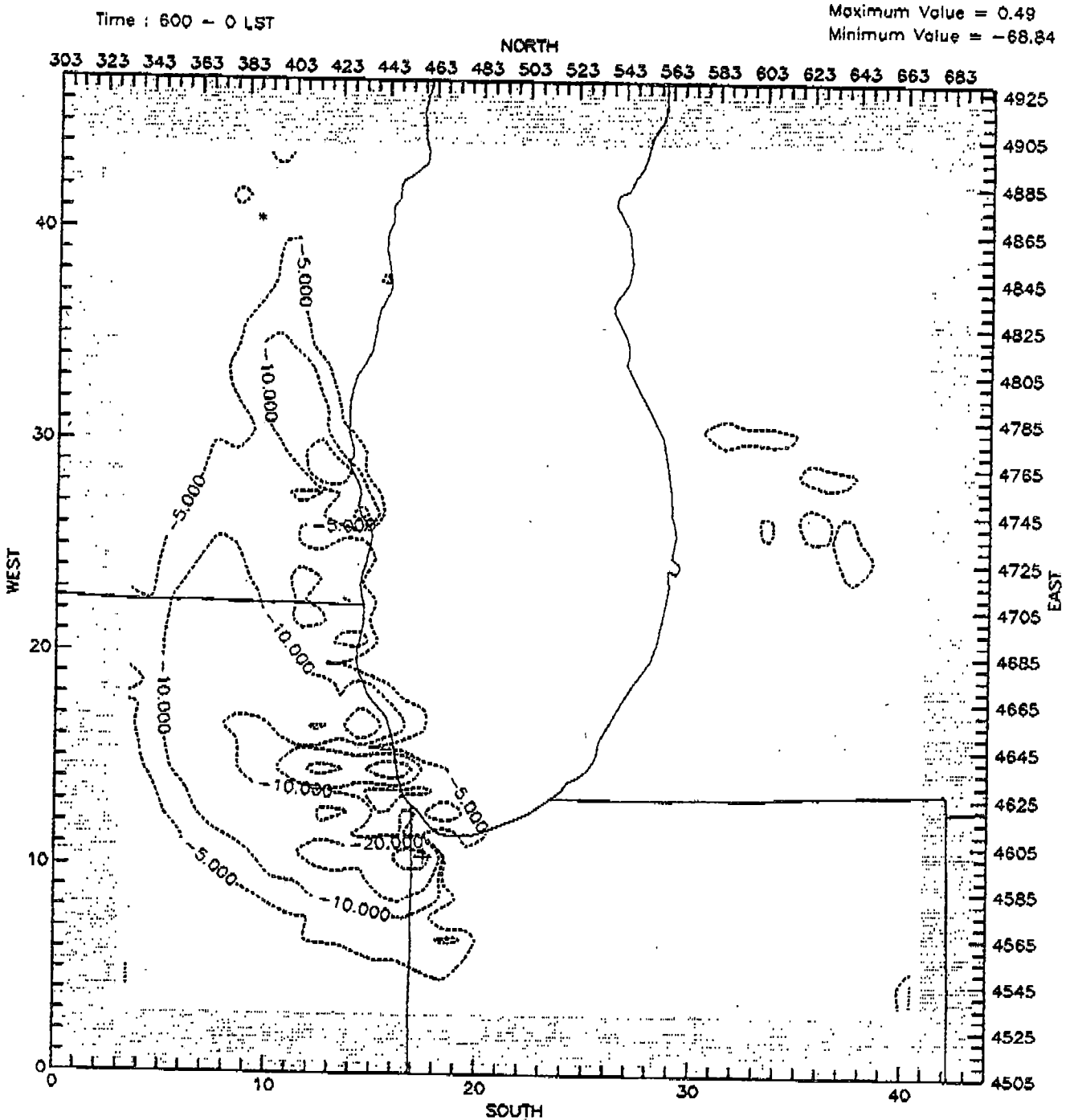


FIGURE 8. Maximum hourly CO differences (ppb) (Ethanol minus MTBE scenarios), 9 km grid on July 21, 1987 in the Lake Michigan region.

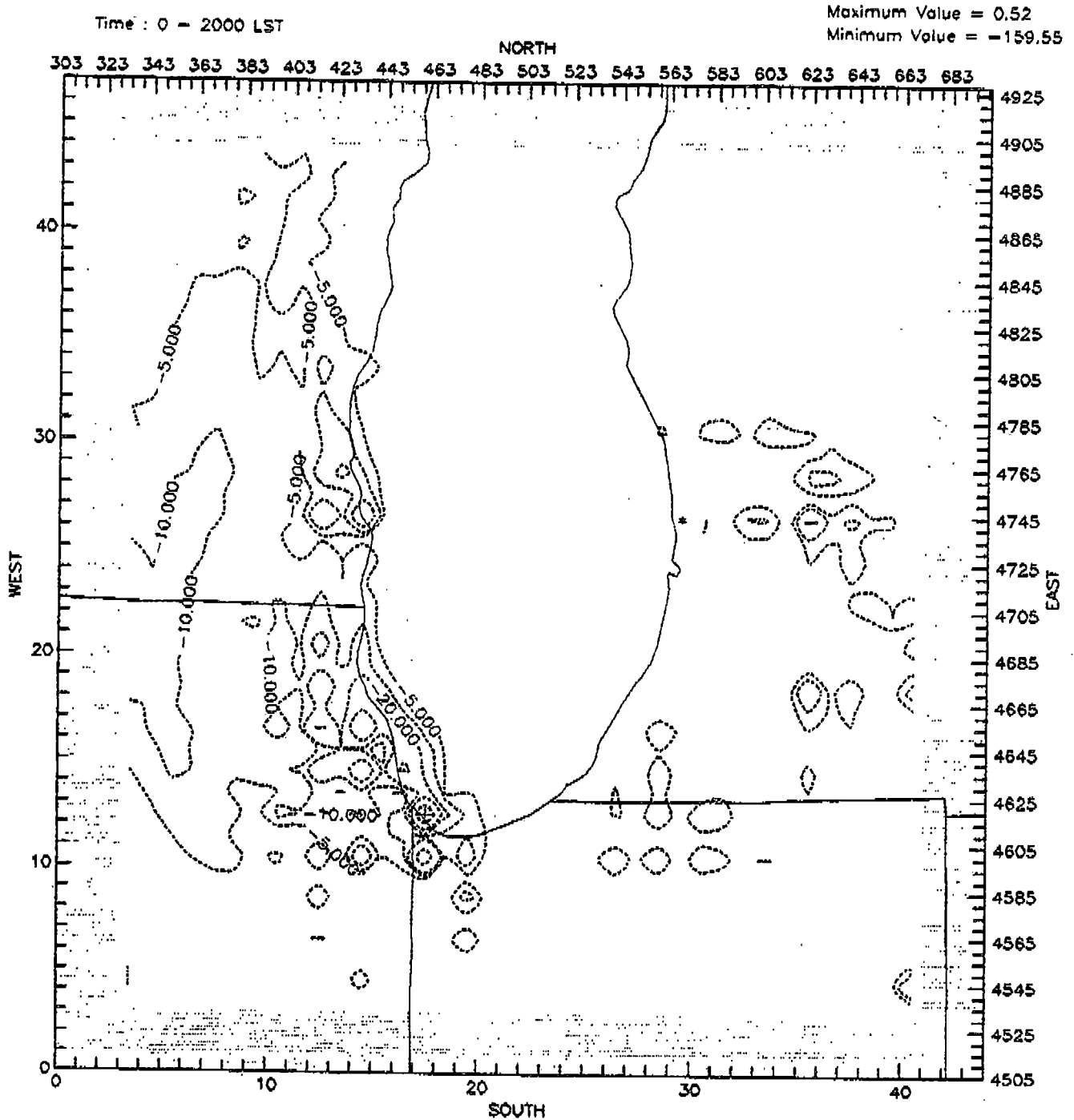


FIGURE 9. Maximum hourly CO differences (ppb) (Ethanol minus MTBE scenarios), 9 km grid on July 22, 1987 in the Lake Michigan region.

comparing the ethanol blend and MTBE blend scenarios. As can be seen by examining these figures, the greatest negative change in CO maximum concentrations (i.e. the greatest ethanol-induced reduction in CO when compared to the MTBE blend scenario) occurs between the location of the highest ozone peaks (the urban area of Chicago) and the general area of the greatest differential ozone impact of the ethanol blend as compared to the MTBE blend scenarios.

The results shown in the Figures 1 through 6 are for ozone only and the times of day when the ozone maxima occur are not given. Table 1 shows the five highest ozone values predicted for each day for both the MTBE and ethanol scenarios, along with their grid locations and the time of day when the maximum occurred. The results for  $\text{NO}_2$ , PAN, and  $\text{HNO}_3$  results are included in Table 1 as well. It appears from the times when the  $\text{NO}_2$  peaks occur (nighttime) that these peaks are not the result of photochemical conversion of the primary emitted species NO to  $\text{NO}_2$ . In smog chamber experiments a photochemical  $\text{NO}_2$  peak is routinely observed because the VOC and  $\text{NO}_x$  precursors are added at the start of the experiment and not over a period of time as occurs in the urban atmosphere. Therefore, the nighttime  $\text{NO}_2$  increases are apparently due to the emissions of  $\text{NO}_2$  into a shallow stable surface layer without any mixing or photochemistry.  $\text{NO}_2$  is assumed to be emitted at the rate of 5 percent of the total  $\text{NO}_x$  emissions with the remaining 95 percent being NO. It should also be noted that any local ozone concentrations can titrate emitted NO to  $\text{NO}_2$ . It is not clear to what extent either of these two mechanisms (emitted directly or titrated from local ozone) is at work in the Chicago region on the days modeled.

TABLE 1. Results summary.

Pollutant (ppb)	Day 1						Day 2					
	Cell		Time	Ethanol	MTBE	Change	Cell		Time	Ethanol	MTBE	Change
	X	Y					X	Y				
Ozone	24	15	15	116.31	116.22	0.09 Ave	23	15	13	131.75	131.66	0.09 Ave
	18	15	16	114.49	114.24	0.25	24	15	14	130.79	130.73	0.06
	18	14	16	109.48	109.33	0.15	22	15	12	130.03	129.94	0.09
	16	18	14	108.71	108.63	0.08	22	14	14	120.91	120.84	0.07
	23	15	15	108.5	108.43	0.07 0.128	24	16	12	112.72	112.67	0.05 0.072
NO <sub>2</sub>	14	15	21	101.28	101.09	0.19	14	17	5	112.05	111.77	0.28
	13	15	23	99.13	98.89	0.24	14	16	4	111.67	111.39	0.28
	15	13	22	98.82	98.59	0.23	18	13	6	108.84	108.04	0.8
	15	12	22	98.44	98.32	0.12	15	15	5	108.13	107.56	0.57
	14	14	23	97.2	97.02	0.18 0.192	13	15	0	97.56	97.3	0.26 0.438
PAN	16	18	14	3.7	3.69	0.01	22	15	11	6.79	6.78	0.01
	16	17	14	3.51	3.5	0.01	22	16	10	4.85	4.85	0
	26	20	12	3.25	3.25	0	23	16	11	4.76	4.75	0.01
	22	20	13	3.23	3.23	0	23	15	12	4.63	4.63	0
	26	21	12	3.22	3.22	0 0.004	22	17	10	4.31	4.31	0 0.004
HNO <sub>3</sub>	24	15	14	16.38	16.36	0.02	21	26	13	24.22	24.2	0.02
	22	15	14	16.02	15.99	0.03	21	25	13	24.2	24.18	0.02
	17	15	14	15.91	15.89	0.02	22	15	13	23.9	23.89	0.01
	16	15	15	15.9	15.87	0.03	21	24	13	23.84	23.81	0.03
	23	15	14	15.76	15.75	0.01 0.022	21	27	13	23.83	23.8	0.03 0.022
6-hr O <sub>3</sub>	18	15	14	103.49	103.28	0.21	22	15	10	121.12	121.03	0.09
8-hr O <sub>3</sub>	16	18	12	98.4	98.27	0.13	22	15	10	118.37	118.27	0.1

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### 3 DISCUSSION

The results presented in the previous section appear to support the conclusion that a net increase in VOC emissions from vehicles using 10 percent ethanol blends may not significantly increase urban ozone compared to 11 percent MTBE blends because the reduced exhaust VOC and CO emissions from the higher fuel oxygen content in the ethanol blends can compensate for the increased evaporative VOC emissions, which are much lower than the exhaust emissions in photochemical reactivity. In this section we discuss detailed reasons which can support this conclusion and discuss the reasons why this result appears to be different than the results obtained by AQIRP.

#### COMPARISON WITH AQIRP RESULTS

Four of five percentage measures of the ethanol impact can be compared directly with the AQIRP study: (1) the net percentage increase in mobile VOC emissions, (2) the net reactivity factor weighted percentage increase in mobile VOC emissions, (3) the net percentage increase in overall VOC emissions and (4) the net percentage increase in overall ozone simulated by the UAM. A fifth measure is the percentage ozone increase relative to the estimated total ozone from the mobile fleet considered; this last measure requires running the grid model with zero emissions from the fleet considered; such a simulation was not performed in the ICGA study. Table 2 summarizes the four comparisons.

As seen in Table 2, the 12.5 percent net increase in mobile VOC emissions in the ICGA study of Chicago is somewhat less than the increases used in the AQIRP study. The increase is less in the ICGA study because the EPA MOBILE4.1 emissions model predicts less evaporative and running loss increases for a 1 psi RVP increase than what was measured in the AQIRP study fleet for splash-blended ethanol and because the EPA estimate of 14.5 percent reduction in exhaust VOC for ethanol blends is apparently more than the measured reductions in the AQIRP data.

The overall exhaust reduction used in the ICGA study between the MTBE base and the ethanol blend is 5.2 percent, as is shown on Table 2 of Volume 1. The overall exhaust reductions used in the AQIRP simulations were only released on 14 July 1992. The reductions appear to be lower than used in the ICGA study in spite of the fact that the AQIRP study used clear gasoline as a base rather than the 11 percent MTBE blend used

**TABLE 2. Comparisons of percentage changes from base fuel, due to the net effects of ethanol blends, in VOC and ozone air quality between the AQIRP and ICGA studies. Reactivity is estimated using the method of Carter (1991). ICGA base is MTBE fuel, AQIRP base is clear fuel.**

<b>Study/City</b>	<b>Mobile VOC</b>	<b>Reactivity- Weighted Mobile VOC</b>	<b>Overall VOC</b>	<b>Overall Ozone</b>
<b>ICGA, Chicago</b>	12.5	4.3	0.6	0.07
<b>AQIRP</b>				
<b>Los Angeles</b>	23	14	2.1	1.1
<b>Dallas</b>	17	14	2.1	1.0
<b>New York</b>	17	15	2.8	0.8

in the ICGA study. This observation is based on AQIRP Technical Bulletin No. 6 (1991) which notes that 10 percent ethanol blends and 15 percent MTBE blends each reduce exhaust VOC by about 7 percent compared to clear fuel. If the effect were linear with MTBE, then an 11 percent MTBE blend would be expected to reduce exhaust VOC by 5 percent so that the difference between a 10 percent ethanol blend and an 11 percent MTBE blend would be only about 2 percent based on the AQIRP Technical Bulletin No. 6. However, this same Technical Bulletin shows that for the fuels simulated using the UAM, the measured reductions (from clear gasoline) were only about 5 percent for one fuel (fuel T compared to S) and less than 2 percent reduction for the other fuel (fuel U compared to fuel F). The reductions used by AQIRP in the UAM are not the same as published in the Technical Bulletin because the averaging process for UAM simulations is somewhat different (SAI, 1990). According to the information released to the EPA on 14 July 1992 the AQIRP used an exhaust VOC reduction of only 2.5 percent for fuel T in the Los Angeles UAM simulation and a reduction of 3.9 percent for the Dallas and New York simulations.

The increased VOC from the evaporative emissions was apparently much higher in the AQIRP study than the 26.3 percent increase (Table 2 of Volume 1) used in the ICGA study. AQIRP Technical Bulletin No. 6 shows over a 60 percent increase in diurnal emissions between fuels S and T and over a 40 percent increase for these fuels in the hot soak emissions. According to the 14 July 1992 release of information the evaporative emissions were increased about 60 percent for the fuel T simulations in the AQIRP study. As noted in SAI (1990) the protocol for the AQIRP emissions inventory calls for multiplying the MOBILE4.0 emissions by the ratio of the measured test fuel emissions rate to the measured base fuel emissions rate. However, as noted in Volume 1 of this report, the measured emissions rates for evaporative emissions from the AQIRP fleet of 1989 vehicles is considerably less than the predictions from MOBILE4.1. For example, the measured diurnal emissions from fuel-injected cars for the 9.0 RVP fuel used in the ICGA study (fuel W) are less than a third what might be predicted from MOBILE4.1 for the standard test in typical 1989 cars. For the hot soak test the measured emissions for fuel W in AQIRP fuel-injected vehicles is about 40 percent less than the MOBILE4.1 prediction. Thus, the AQIRP fleet appears to have significantly less evaporative emissions than predicted from the EPA data base for typical 1989 cars; the EPA data base is the source of the MOBILE4.1 predictions. There is uncertainty that a 60 percent increase in evaporative emissions measured on the low-emitting AQIRP vehicles can correctly be applied to increase the evaporative emissions of typical vehicles. The AQIRP is apparently conducting tests to assess this part of the protocol.

For running loss emissions the ICGA used an increase of 45.3 percent (Table 2 of Volume 1). From the AQIRP Working Data Set used in this ICGA study the running loss emissions increase for fuel W over the clear fuel (V) was measured to be more than 2 orders of magnitude. The AQIRP protocol for running loss effects is unclear. However, the emissions information released on 14 July 1992 indicates that the AQIRP used running loss increases for fuel T (compared to fuel S) of 195, 72 and 62 percent for the UAM simulations of Los Angeles, Dallas and New York, respectively.

For mass emissions effects the AQIRP used less reduction in exhaust and more increases in evaporative and running loss emissions than used in this ICGA study. Both of these differences contribute to the net lower VOC mass increase for gasoline vehicles shown for the ICGA study in Table 2. The next column in Table 2 shows the reactivity-weighted (using Maximum Incremental Reactivity, MIR, factors) net VOC effects of ethanol between the AQIRP and this study. The difference is even larger than the difference in mass effects just discussed. Table 2 shows that the reactivity-weighted VOC increase is only 4.3 percent for this ICGA study, but the AQIRP increases are all nearly 15 percent. Moreover, the percentage increases in mass VOC and reactivity-weighted VOC are at least comparable in the AQIRP (percentage increase in reactivity-weighted VOC is reduced 12 to 40 percent from the percent increase in VOC mass), but for the present case the net percentage drops by nearly a factor of 3. In order for such a drop in net effect to occur the reduction in exhaust needs to compensate for increased evaporative emissions by a combined mass and reactivity effect. That is, the exhaust reduction must be large in mass and significantly more reactive than the evaporative emissions reactivity and the evaporative mass increase must be low. In the previous discussion, the mass effects in the AQIRP were noted to be significantly different than those in the ICGA study: exhaust reductions are less in the AQIRP study and evaporative increases are more than the ICGA.

Speciation information was released by AQIRP on 14 July 1992. However, the electronic format of this information was not distributed by the EPA in time for this review. Nevertheless, some analysis of reactivity is possible. First of all, the fuels used in the AQIRP study are designated as "research" reformulated gasolines. The aromatic and olefin content of the AQIRP fuels simulated with the UAM are significantly less than the fuel W used in the ICGA study. In spite of this the m-xylene content of the evaporative emissions profile released on 14 July for fuel S of the AQIRP study is about twice the m-xylene fraction of the evaporative profile used in the ICGA study (shown in Appendix A of Volume 1 of this report). For the exhaust profiles the m-xylene fractions appear comparable between the two studies. This is one indication, along with the second column of Table 2, that the reactivity spread between the exhaust and evaporative emissions is much greater in the ICGA study than in the AQIRP study. Part of this apparent difference stems from the two protocols.

In the ICGA study, increases in evaporative emissions are assumed to come primarily from the vapor component represented by the running loss species profile which is quite low in reactivity. In the AQIRP study, the evaporative species profile is not varied as emissions increase. As noted above, the AQIRP fleet emits significantly less evaporative emissions than the typical 1989 vehicles in the EPA data base. Based on discussions with the EPA the low emissions in the AQIRP fleet was characterized (at least for heuristic purposes) as seepage in Volume 1 of this report. Conceptually as the mass of evaporative emissions are scaled up to the typical rates in the EPA data base the protocol for the ICGA reduces the reactivity by altering the speciation profile by adding the running loss profile which is characterized (also heuristically) as the vapor component.

In the AQIRP study, to our knowledge, measured speciation profiles are not altered in any way. That is, if the measured diurnal mass emissions rate in the AQIRP was one third the value for typical cars in the EPA data base (as noted above based on MOBILE4.0 predictions), then the mass emissions are increased by a factor of 3 for UAM modeling but the speciation profile remains the same as measured in the AQIRP fleet.

The last two columns in Table 2 show the overall UAM percentage changes in VOC emissions and ozone. Although the overall VOC emissions changes very little in the ICGA study (0.6% between the base and the ethanol scenario), the change in overall ozone of 0.07 percent is even lower in comparison to the AQIRP results. As noted in the previous section the absolute ozone change is only 0.09 ppb in peak ozone. Note that tests have been performed on the UAM to determine what constitutes a real effect and what level of ozone change falls within computer numerical accuracy. On typical computer systems, the tests indicate that an ozone change above 0.05 ppb is a real effect; the lower bound on this issue is not known.

In the AQIRP study the mobile VOC inventory addressed for fuel S was 7.5, 11.6 and 15 percent of total VOC in Los Angeles, Dallas and New York, respectively. As shown in Table 2 of Volume 1, the ICGA mobile VOC inventory is 5.2 percent of total VOC. Hence, the ICGA is comparable but lower than the other studies. However, the percent ozone increase due to ethanol is much lower than the AQIRP percentages as shown in Table 2 of this Volume. If the overall percent ozone changes are normalized to the percent VOC which is addressed as mobile in the studies, the ICGA value is 0.013 for percent ozone increase per percent mobile VOC; the corresponding values from the AQIRP study are 0.15, 0.086 and 0.053 for Los Angeles, Dallas and New York, respectively. Therefore, the impact in the ICGA is always less than the AQIRP by at least a factor of 4 (comparing New York) and up to over a factor of 10 (comparing Los Angeles). The reactivity-weighted VOC effects shown in Table 2 also suggest nearly a factor of 4 lower impact from the ICGA study than from the AQIRP study. Hence, the UAM results, when normalized to the amounts of mobile related VOC emissions are consistent with the reactivity-weighted estimate that the ICGA study gives at least a factor of 4 less ozone increase from ethanol blends than is estimated from the AQIRP study.

In summary, the key reasons for the lower ICGA impact appear to stem from all 3 of the features discussed which can contribute to a compensation of increased volatility-related emissions by the extra oxygen in ethanol: (1) a large mass reduction of exhaust emissions, (2) a large difference in reactivity between exhaust and evaporative emissions and (3) a minimal increase in evaporative emissions. On each of these 3 features the AQIRP study shows less potential for a compensation effect than does the ICGA study.

## 4 CONCLUSIONS AND RECOMMENDATIONS

### CONCLUSIONS

A 10 percent ethanol blend has 75 percent more fuel oxygen than an 11 percent MTBE blend. This extra oxygen can compensate for most of the increased VOC emissions due to the higher volatility of the ethanol blend, if there is a large enough difference in photochemical reactivity between the exhaust emissions that fuel oxygen reduces and the evaporative emissions that ethanol increases. Compensation results from the net sum of 3 effects: (1) the VOC emissions which increase (evaporative and running losses) can be low in photochemical reactivity (lower even than the original evaporative emissions because the increase is from the light, mainly paraffinic, vapor and ethanol itself, not from the high boiling fraction which contains the most reactive aromatics); (2) the oxygen in the fuel reduces the exhaust VOC emissions which are more reactive than the increased evaporative emissions (especially in older cars); and (3) carbon monoxide is reduced by the fuel oxygen and CO is partially reactive towards ozone formation. Additionally, much of the increased evaporative emissions (running losses in particular) are released later in the day at different times than much of the main exhaust emissions. Apparently, the morning emissions of highly reactive exhaust emissions from cold start operation of vehicles is also a more critical time of day for VOC emissions contribution to ozone formation than the mid to late afternoon when increased evaporative emissions are mostly released.

The present study demonstrates the compensation effect using the UAM and a set of assumptions that are designed to compare the two fuel oxygenates using existing data and minimize uncertainties involving refinery blending variations. Therefore, this study assumes that both the MTBE blend and the ethanol blend were created by splash-blending with the same base clear gasoline. Unfortunately some key uncertainties still remain due to a lack of data on emissions from 11 percent MTBE blends made from the same clear base as a 10 percent ethanol blend, but the effect of these uncertainties on the basic conclusion would primarily come from the relative reactivities of the exhaust and evaporative emissions in all the possible combinations (between the two exhaust emissions, between the two evaporative emissions and between the exhaust and evaporative emissions in either blend).

## RECOMMENDATIONS

This study used the best episodic framework currently available to examine the ethanol blend impact on urban ozone in the Chicago area. A much better modeling data base should soon be available from the LMOS program. Along with better meteorological inputs, a new LMOS base episode will also have a much improved base emissions inventory. New ethanol impact studies with improved emissions and meteorology can also be coupled with constructive inputs stemming from reviews of this study.

In the present study comparative reactivities between the two oxygenate blends was assumed to be nearly identical even though some data suggests that differences may be important. Reactivity (Carter) factors from the AQIRP study suggest that MTBE *increases* exhaust reactivity relative to clear gasoline and ethanol *decreases* exhaust reactivity. The present study constructed an exhaust reactivity profile for the MTBE blend (due to the absence of appropriate data) that was *less* reactive than the exhaust profile of the ethanol blend. Therefore, new data on comparative exhaust reactivity between MTBE and ethanol blends are expected to strengthen the compensation conclusion found in this study. Data on both the evaporative mass effects and speciation of oxygenates at low RVP is now being obtained by the EPA. The high temperatures of ozone episodes are expected to increase the mass of ethanol emissions more than MTBE emissions, but the importance of this is not known as overall RVP is reduced. Southern states have higher temperatures but lower RVP requirements. Thus, the implications of new data on evaporative emissions are uncertain concerning the conclusions of the present study of the Chicago area and any conclusions about the applications of the present conclusions to other areas, especially the Southern areas with high urban ozone problems.

Other caveats to this study are uncertainties due to the importance of the older cars on the road in 1995 relative to future years and uncertainties due to the importance of nonroad emissions and refueling emissions. More studies will be needed to assess effects on the present compensation conclusion due to calendar year fleet turn over and the relative importance of refueling emissions increases to nonroad exhaust emissions decreases from the use of ethanol blends.

In the discussions above, many of the caveats pertain to the lack of complete data for characterizing the emissions from the use of a MTBE or ethanol blend. Some obvious needs for better data are the exhaust mass and reactivity effects comparing 11 percent MTBE and 10 percent ethanol from the same clear RFG-like base gasolines. However, the key to a small ozone impact seen in this study is the low reactivity of the increased VOC emissions resulting from the use of splash-blending ethanol. In this study a methodology was developed to vary the speciation profile with the emissions rate of evaporative emissions. This methodology considered low emissions rates as "seepage" and the higher rates of emissions due primarily as "vapor" emissions. These terms are heuristic in nature and not necessarily accurate descriptions of the processes involved. The two profiles used to represent these two types of evaporative emissions are

significantly different in speciation profile and the methodology creates profiles which vary in reactivity such that high emissions rates are dominated by the light paraffins commonly associated with adjusting fuel volatility at refineries. The methodology developed and used for this study follows trends expected from existing data and from our discussions with EPA staff and others. There is no data base which specifically validates this methodology. In the AQIRP, no such methodology was used; the speciation profile for evaporative emissions was held fixed even though the measured emissions rate in the AQIRP fleet was as much as a factor of 3 less than expected from the EPA emissions model MOBILE4.0. Therefore, evaporative emissions profiles need to be studied as a function of emissions rate.

Since, evaporative emissions are very sensitive to several variables such a study should check the many parameters involved and develop methodologies to change the speciation profiles correctly. The parameters involve the fuels, the vehicles, the temperature and the previous history of the vehicle. The fuel parameters can depend on the presence of an oxygenate and the clear gasoline RVP-adjustments made at the refinery by adding (or not adding) light paraffin compounds. Vehicle parameters involve the basic test results obtained with standard tests and the potential for some vehicles to respond to the presence of oxygenates (Whitten, 1992). Temperature effects are well documented for the effect on mass emissions rates, but effects on the speciation profile are not well documented; both seepage and vapor can increase with temperature, but not necessarily by the same amount. Vehicles not driven very far will not have the canister purged as well as vehicles driven a long distance, so that the vehicles driven the shorter distances will have more vapor-like evaporative emissions due to canister overloading. Also vehicles parked in the hot sun can have more fully loaded canisters than vehicles at dawn.

Smog chamber experiments might be helpful to demonstrate that a net increase in VOC can result in little or no increase in ozone. A side-by-side experiment could be performed with a mixture of exhaust and evaporative VOC on one side and reduced exhaust but increased evaporative emissions on the other side. Because exhaust emissions are typically more reactive than evaporative emissions, the "neutral" ozone point will occur with more evaporative increases than exhaust decreases. For a smog chamber demonstration fairly large changes will be necessary to insure that the results are within experimental variance. For example, a 50 percent exhaust (or surrogate exhaust) VOC reduction might be coupled with a 100 percent increase in evaporative VOC. If the expected reactivity difference is near a factor of 2, then little change in ozone would be expected if the base experiment side had equal exhaust and evaporative concentrations.

Blends between 10-20 percent ethanol could be studied. The present results suggest that 11 or 12 percent ethanol might provide complete compensation for volatility increases because such blends presumably would have no more volatility increase but the VOC and CO reductions should be higher than 10 percent blends. However, additional NO<sub>x</sub> increases may be a problem.

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THE WHITE HOUSE  
WASHINGTON

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- Ethanol rules of EPA, would not allow Ethanol 2  
The use of Ethanol has been a major <sup>Bused</sup> concern to Gov. Edgar & other midwest governors.
- EPA has banned the use of ethanol during certain times of the year
- if the rules are changed, this would be a very popular place to announce it.
- if decision / exception is not being made  
→ we should stay away from agric discussion

Dave Binder

Gov calls it  
" - Washington "

→ wash your clothes

SF89-039

AD-1

"I have created my Butter Cow at several fairs and conferences over the years, but I have four steady places," Lyons said. Besides the Illinois State Fair, she exhibits her talents at the Iowa and Kansas State Fairs, and the National Cattle Congress Conference in Waterloo, Iowa, every year.

Lyons' talents have led to appearances on several television shows including "To Tell The Truth" and "Late Night with David Letterman." She has also created sculptures out of cheese blocks, and various others out of butter including practically everything but a dog which she hopes to do some day.

"But the Butter Cow and Calf have always been my favorite; I am partial to my Jersey," Lyons said. Although she creates her Butter Cow and Calf each year at the Fair, it's always a little different. Fairgoers will never see the same sculpture twice, according to Lyons.

While visiting the Fair, don't miss Norma Lyons' 20th anniversary Butter Cow, located in the Dairy Building. The 137th Illinois State Fair runs Aug. 10-20.

# Illinois State Fair History

Its grass-roots beginnings paved the way for the Illinois State Fair's commitment to excellence and showcasing of the state's agricultural industry, education and the arts. Attracting a diversified crowd with a family-orientated atmosphere, the Fair provides an informative and fun-filled experience for everyone.

As it enters its 140th year amidst budget constrictions, the Fair forges ahead to continue its goal of presenting an entertaining gala of activities for all of Illinois to enjoy.

The legislature reduced funding for the 1992 Illinois State Fair by more than \$1.7 million. The lack of funding forced Fair officials to cut the first two days of the celebration, followed by reductions in entertainment and events.

The Fair also has been limited in the amount of money spent on repairs and renovations. However, the years have taken its toll on many structures and some maintenance and repairs have been required. All projects utilize Capitol Development Board bond monies. The Fair consults with the Illinois Historic Preservation Agency (IHPA) on keeping the Fair buildings as close to their original design as possible. Another priority is the implementation of making the Fair structures more handi-accessible. The Americans with Disabilities Act guides the Fair on the installation of various handicapped facilities throughout the Fairgrounds.

Not only will the budget cuts affect the Fair, but the 250 events that are scheduled throughout the year. However, the first visible impact will be seen at the Illinois State Fair. Bud Hall, State Fair manager said the goals remain the same to "putting on a well-balanced, bright, clean Fair that offers activities for every age group and continues to showcase the state's leading industry agriculture."

The Illinois State Fair opened on October 11, 1853, on Springfield's westside, where DuBois School and Sacred Heart Academy now stand. Back then 765 exhibits were displayed compared to today's 550 exhibits, which includes concessions and exhibits. Admission to the Fair was a quarter, and even back then the Fair boasted outstanding exhibits on livestock, produce, tools, flowers, art needlework and products of home recipes.

The 1853 Fair promoted improved methods of agriculture and livestock raising and displays on labor, industry, education, arts and sciences. The first Fair turned a profit of \$853 even after premiums and awards were deducted from the gross receipts of \$4,751.

Up to 20,000 people came to the Fair on its third day, and it was reported "not one inebriated man was seen!"

In 1854 the Fair again was held in Springfield, but this time the attraction was Sen. Stephen A. Douglas' speech, and Abraham Lincoln's rebuttal the next day.

The next 38 years, after the 1854 Fair in Springfield, the Fair was held in 12 cities throughout the state: Alton, Centralia, Chicago, Decatur, DuQuoin, Freeport, Jacksonville, Olney, Ottawa, Peoria, Quincy and again in Springfield.

When the Fair was held in Centralia in 1858, chaos ensued when two farmer's children accidentally ascended into the sky when the hot-air balloon tied to their father's fence broke off. Fortunately, the balloon landed 18 miles away and the children were returned unharmed to their tearful parents.

The Civil War and the economic depression hampered the tenth anniversary of the Fair when the proposed site in Peoria had been taken over as a recruitment camp for the Union soldiers. Some premiums were awarded but without a general Fair site.

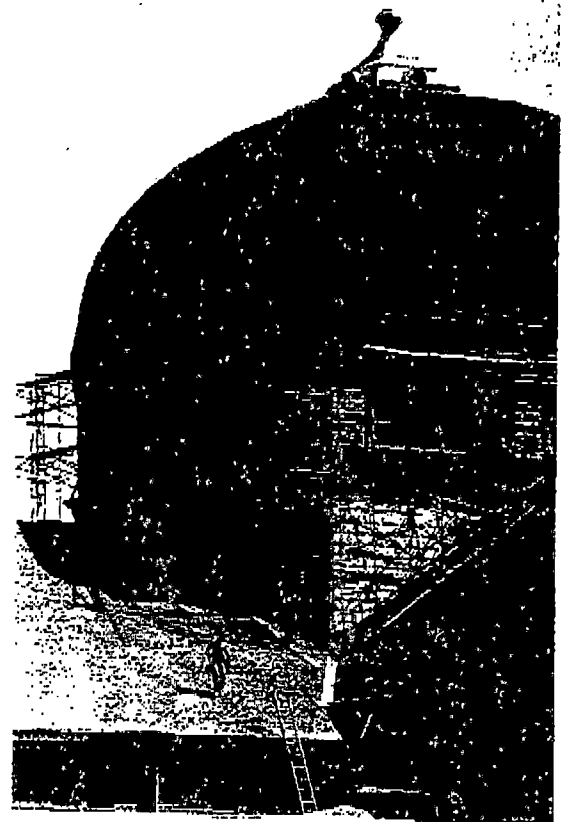
Springfield finally became the home of the Fair on September 24, 1894, for a six-day run. Admission was .50 for adults, .75 for one person on horseback and \$1.25 for a carriage-load of four. Premiums topped more than \$30,000 that year, and many of the buildings on the Fairgrounds were renovated. The biggest undertaking was the construction of The Exposition Building which had its cornerstone laid on the Fourth of July. Today, the Exposition is in its final phase after several years of renovation. The tile on the mezzanine was replaced because of asbestos contamination. Some work included roof repair and replacement, improved lighting, cleaning and painting and the interior color scheme has changed to match the original color of blue.

For the amount of \$69,500, a spectacular Dome Building was purchased from the Chicago World's Fair and was reconstructed for the 1895 Fair. It was reported that the glass and metal dome was the second largest unsupported dome in the world. The Dome building, located east of the Exposition Building, had horticultural exhibits and office space for the National Guard. Tragically, the building burnt down in August of 1917, just before the Fair opened that year.

Through its long history, the Illinois State Fair has earned the reputation as the best agricultural show in the country. Fairgoers can learn the basics of farm management, livestock, farm machinery and produce. Premiums serve as an incentive to have exhibits in other fields such as arts, crafts and hobbies, education and science, culinary skills, music and competition in various games and races.

Currently, the Fairgrounds covers 366 acres, including the 210 added in 1924. The Fair has been held in August since 1926 with earlier fairs held in October and September. The Fair was not open from 1942 to 1945 because the U.S. Army Air Corps used the grounds as a supply depot during World War II. The Illinois State Agricultural Society managed the Fair until 1872 when the State Department of Agriculture was organized.

Its heritage has reflected the nation's history in many ways, and therefore, it would seem unfair to not include everything. It would be impossible to detail all the department's histories without becoming a novel. Relax, and have yourself a great time at the Illinois State Fair. There is something for everyone at the Illinois State Fair isn't a cliché, but a reality.



## Pork Avenue Cafe

A select choice of pork products give hungry fairgoers a chance to "pig out" at the Pork Avenue Cafe. The cafe is located west of Farm Expo, across from Food-A-Rama and will be open from 10 a.m. to 8 p.m.

New this year is the alternative to other Fair entertainment, "Hog Rock Cafe," where homespun talent can amuse the crowd on a karaoke machine on August 15

at 8 p.m. The family fun will have food samples, prize giveaways and refreshments for those who participate in the entertainment. The attraction may continue throughout the Fair, depending on participation.

Pork lovers have made the cafe one of the top sellers in the past few years because of the delectable pork sandwiches, pork burger, butterfly chop and America's cut.

The pork dinners are complemented with dressings such as a baked potato, dinner roll and of course, applesauce. One feature is the Little Farmer's meal which includes a pork burger, chips and milk or orange juice.

Located in the Commodity Pavilion, the Pork Patio is another way to feast on pork. The specialty is pork sandwiches and boneless BBQ rib sandwiches served daily at the Fair.

## Professional Art Exhibit

It's all in the eye of the beholder as fairgoers indulge in the creations of Illinois artists at the Professional Art Exhibit in the Firehouse Gallery, located at the corner of Main Street and Central Avenue.

The exhibit, which is in its 46th year, commemorates Springfield photographer Herbert Georg.

All artistic tastes can be satisfied with displays of oil and watercolor paintings, drawing and graphics, sculpture, crafts and photography.

Artists can submit up to two pieces of work. All types of artwork from realism to

the abstract are entered with the perspectives of the fairgoers considered. There is no admission fee.

The Firehouse Gallery showcases 85 works from professional artist. Success is sweet in all categories with cash awards of \$400 for first place, \$250 for second place and \$125 for third place. The most prestigious award of the exhibit is the Governor's Award, for which the artist receives \$1,500 and the artwork is permanently displayed at the Executive Mansion.



## Ethanol Expo

As the nation's leading ethanol producer, Illinois has a large stake in how this industry grows. Ethanol Expo — a feature of the Agri-Business Trade Show in the Illinois Farm Expo — features ethanol and its uses and importance to Illinois.

In its exhibit "Ethanol — A Clean, Renewable Fuel," Ethanol Expo invites the general public to explore informative displays and products already using ethanol.

Sponsored in part by Archer Daniels Midland, Pekin Energy Company, the Illinois Corn Growers Association, the Illinois Department of Energy and Natural Resources and the state of Illinois, Ethanol Expo highlights the production and utilization of ethanol fuel through the use of new technologies.

Located in the Morton Building east of the Dairy Building and north of the Lincoln Stage, Ethanol Expo will include a 95% ethanol-powered bus from Peoria Mass Transit, an ADM semi-truck powered by 95% ethanol, an ethanol-powered (E-10) 1993 Mach 1 racing boat, an ethanol/diesel fuel tractor from the University of Illinois and an ethanol variable fuel (E-85) Chevy Lumina from General Motors.

Other displays will be provided by Detroit



Diesel, Pekin Energy Company, the Vienna Correctional Facility and other governmental bodies, universities and agri-businesses.

Visual exhibits include an audio-visual center and working displays by researchers,

universities and agri-businesses on how ethanol is produced and used.

Ethanol Expo is open 8 a.m. to 8 p.m. daily with show hours from 10 a.m. to 8 p.m.

# CORNDOG

**VOSE'S**  
FINE FOOD & DRINK

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# INTRODUCTION

**P**eople come from far and wide to attend opening day of the Illinois State Fair. The year-long wait for a corndog has come to an end. Some fair-goers will stop at the first corndog concession in sight. Others will be more selective and take the extra few minutes to walk down Main Street to Grandstand Avenue, and walk directly to the neon Pepsi sign that stands 25 feet in the air. Below that sign is the home of the best corndog at the state fair, cooked up by Bob Vose. The corndogs are always hot, always fresh, and never reheated. The plump, juicy weiner, batter-dipped and deep-fried to a golden brown, with or without mustard and ketchup, is undeniably the corndog worth waiting for.

These corndogs have won the "Best Corndog" title twice at the Illinois State Fair, in 1976 and again in 1986. The first contest was sponsored by the St. Louis Globe Democrat with Governor Jim Thompson serving as one of the judges, the other was a 1986 cook-off sponsored by local radio station, WYMG. The corndogs have been given much publicity by local news broadcasters including Don Hickman and Susan Finzen of WICS TV-20, Bob Murray of WAND TV, and Don Murphy of WYMG radio.

Just how did Vose's corndogs become such a state fair tradition? Let's take a look . . .



*A familiar sight high in the sky.*

## LIFE BEFORE CORNDOGS

**B**ob Vose began his work at the American Ice and Fuel Company while attending high school. After classes, he would walk over to the ice house at 10th and Miller in Springfield where he would work for 3 hours before returning home to complete his school work. After graduating from Lanphier High School in 1947, he continued to work for William Vetter, Sr., the plant manager. Bob enjoyed the work and even more, he enjoyed his conversations with the young girl that worked in the manager's office. She was a very attractive girl with big brown eyes and dark curly hair. Her name was Virginia and she was Bill Vetter's daughter. Bob occasionally asked her for a date, but to his dismay she would turn him down. Even though she thought he was very handsome, Virginia was not interested in dating him or any other co-worker.



*Bob Vose delivering ice in 1947.*

In 1948 the American Ice Company merged with the Union Ice Company (now known as the Central Illinois Ice Company) at 10th and Edwards. That was the year Bob began delivering ice at the Illinois State Fair. During this time Virginia left her job at the ice house for one at the city street department. She eventually began dating Bob.

Bob continued working at the ice company until he joined the Army and was sent to Germany in 1951. Upon his return to the states in 1953, he continued with his ice deliveries at the Illinois State Fair. At the same time he took a full-time position at City, Water, Light and Power as a meter-reader.



*William Vetter, Sr. (left) and an unknown assistant deliver ice at the Illinois State Fair.*

## RECIPE FOR SUCCESS

**L**ike everyone else who visits the fair, the Vose children really liked corndogs. After two years of sampling corndogs sold by other vendors, the Vose brothers decided to try their hand at selling them.

This was the beginning of Vose's Famous Corndogs. During the first year the Vose brothers charged \$.25 for their secret recipe dogs. Sno-cones cost \$.10 and lemonade shake-ups were, as Harold Vose would say, "One Quaaataaa."

The hot dogs on a stick were dipped in "Grandma's Secret Recipe" and fried to a golden brown in a 14 inch flat square pan about 4 inches deep. It was only possible to cook a few dogs at a time because they were laid flat in the grease and rolled continuously to brown all sides. This was a slow process, but the best one available at the time. In fact, it was so slow that it was easy to get behind on orders.

The dogs were an instant hit for the Voses and since they were sometimes unable to keep up with the constant demand, Harold came up with what he thought was the perfect solution. On the first Sunday, Veteran's Day, he cooked up approximately 75 corndogs. He figured the crowd would be leaving the grandstand all at once, like the night before, when the grandstand show let out.

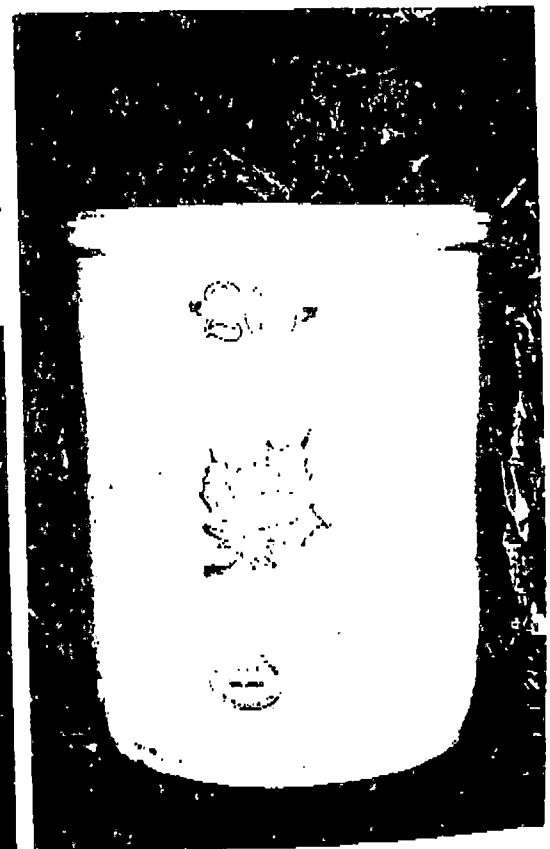
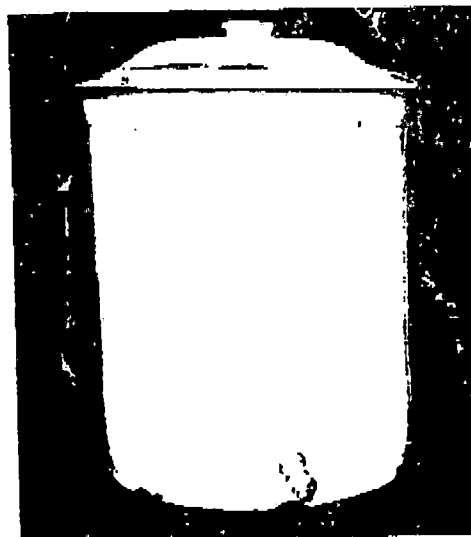
He must not have noticed the Drum and Bugle Corps participants who came marching down from the Coliseum for the competition in the grandstand. This competition lasted all day and into the evening. People came and went throughout the day; no big crowds.

Needless to say, there were many corndogs left over and most were given away, but someone took a few home, froze them, and gave them to Harold for Christmas.

Corndogs weren't the only new addition that year. The Voses opened a second concession that sold only lemonade shake-ups. They needed another stand and more equipment. Who better to get this from than the man who introduced lemonade shake-ups to the people at the Illinois State Fair, Walter Gayle. Mr. Gayle began this fair favorite back in the 1930's when large beautiful trees lined dirt roads of the grounds.

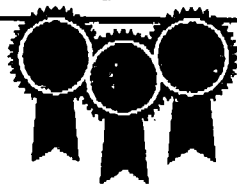
They were assigned a space at the south end of the grandstand, just a short distance from their other concession. They bought a small stand and heavy ceramic crocks for water

*The 60 year-old crocks show their age by the many chips in the ceramic. The significance of the markings on the crock on the right are unknown.*



The Spirit of Excellence  
ILLINOIS STATE FAIR

P.O. Box 19427  
Springfield, IL 62794-9427



(217)782-6661  
FAX: (217)782-9115

F A X

TO: Jennifer Crossman

FROM: Dave Bender

DATE: 8/16/92

SUBJ: Background info!

PAGE 1 OF 9 PAGES:

Jennifer,

Please feel free to call me Today @  
(217)-524-3888. If Tomorrow (Monday) call  
217-527-1992. THANKS!

Dave Bender

"Our 140th Year" - August 18-23, 1992  
15

SF89-039  
FOR IMMEDIATE RELEASE  
August 3, 1989

Dawn M. Jackson 217/782-1593  
Joe Khayyat 217/524-6197

SPRINGFIELD, Ill.--Norma Lyons of Toledo, Iowa, will create her version of the Illinois State Fair's popular Butter Cow for the twentieth time at the 1989 Fair. It has been almost 60 years since a butter cow made its first appearance in the Dairy Building.

Lyons uses almost 500 pounds of unsalted butter, which keeps the moisture out, to sculpt the cow over a wire and wood frame by hand. The process, according to Lyons, takes two days to complete. After the Fair, the butter is scraped off, chilled, and then reused in Lyons' next sculpture.

"The unsalted butter becomes more and more like plastic after it's frozen each time," said Lyons. "This year's batch is new and fresh, so it's been a little softer and easier to work with than that which I used last year."

According to Lyons, the butter can be used for several years; her last batch was eight years old. The new butter was donated by Prairie Farms.

-more-



202/456-6218

OFFICE OF  
PRESIDENTIAL ADVANCE  
**COVER PAGE**

TO: JENNIFER GROSSMAN

FROM: ED COWLING, SPRINGFIELD

TOTAL NUMBER OF PAGES: 15  
*(including cover page)*

DATE: 8/21/92

TIME: 1:05 PM

MESSAGE:

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IF YOU HAVE ANY QUESTIONS OR PROBLEMS WITH THE TRANSMISSION PLEASE CALL.

TELEPHONE NUMBER: \_\_\_\_\_

## MEMORANDUM

TO: Jennifer Grossman  
Research

FROM: Ed Cowling *EC*  
Presidential Advance, Springfield

RE: Ethanol

DATE: August 21, 1992

I spoke with John Varones of Gov. Edgar's staff and he has sent me the attached material. According to John, the basic feeling of many farmers is that, even though EPA has not issued a final regulation concerning the nine highest smog cities (the comment period for the proposed reg. recently ended) they are biased against ethanol and that there is not good science behind their rationale. The farmers feel that they are being outmuscled by the oil industry. There is also, as I'm sure you are aware, a Madigan Plan on ethanol that the farmers are more in favor of than the EPA approach.

I did see a television interview yesterday with the Illinois State Treasurer, Pat Quinn, a Democrat, following on the appearance of Sen. Gore at the Illinois Fair. The implication he conveyed was that Gov. Clinton would have a more favorable position on ethanol than The President and Bill Reilly.

Attachments



**STATE OF ILLINOIS  
OFFICE OF THE GOVERNOR  
SPRINGFIELD 62706**

**JIM EDGAR  
GOVERNOR**

**TESTIMONY BEFORE THE  
HOUSE AGRICULTURE SUBCOMMITTEE ON  
FOREST, FAMILY FARMS AND ENERGY**

**BY**

**JIM EDGAR, GOVERNOR  
STATE OF ILLINOIS**

**AND**

**VICE CHAIRMAN  
GOVERNORS' ETHANOL COALITION**

**APRIL 29, 1992**

Chairman Volkmer and distinguished members of the Subcommittee on Forests, Family Farms, and Energy, with me today are Mr. John White, President of the Illinois Farm Bureau, Mr. Scott Durbin, President of The Illinois Corn Growers Association, and Ms. Becky Doyle, Director of the Illinois Department of Agriculture.

I am pleased to be here today to testify on behalf of the citizens of the State of Illinois. In addition, as Vice Chairman of the Governors' Ethanol Coalition, I wish to present the views of that organization as well. The coalition was formed last October and consists of governors from sixteen states. Governor Ben Nelson of Nebraska serves as the chairman.

Even though ethanol is a relatively new transportation fuel and the ethanol industry is still young, the industry is composed of companies that are strong and experienced producers and marketers. Ethanol has proved that it can help extend gasoline supplies, reduce oil imports, and provide enormous economic benefits to our agricultural economy.

The use of ethanol as a transportation fuel is a very important economic issue throughout the nation, but it is particularly critical in my home state. Illinois produces over one-half of the nation's one billion gallons of ethanol. Consumers in Illinois use more ethanol than any other state. Fully, seventeen percent of the Illinois corn crop is used in the production of ethanol. It is estimated that the ethanol industry employs about 10,000 people nationwide, directly or indirectly, excluding corn producers.

We are here today, however, to discuss the environmental benefits of ethanol in meeting the new clean air act standards. As a transportation fuel, ethanol has only begun to show its potential to reduce dangerous emissions from urban vehicle traffic. Ten percent blends of ethanol have demonstrated

in Denver, Phoenix and other cities that carbon monoxide can be reduced an average of 20 percent. In Chicago, where nearly one-third of the gasoline is blended with ethanol, carbon monoxide levels have declined to a point where today they remain well below U.S. EPA standards.

Our immediate challenge is to demonstrate ethanol's potential to reduce urban ozone levels in areas like Southern California and many east coast cities. In my state, the ozone concerns center around Chicago and the St. Louis metropolitan area. Preliminary research in St. Louis and New York has shown that a 10 percent ethanol blend did not result in any increase in ozone. This study implies that, when 10 percent ethanol is blended with reformulated gasoline, ozone can actually be reduced.

Illinois is working on research to model the impacts of 10 percent ethanol blends on ozone formation. We are confident that these efforts will document ethanol's positive role in meeting the goals of the Clean Air Act to reduce both ozone and carbon monoxide levels in our environment.

The impact of ethanol blended fuels on the ozone is not completely known by scientists. More research is important to our understanding of ethanol's effect on ozone formation. However, there is sufficient reason to believe that the reduction in carbon monoxide and lower reactivity levels attributable to ethanol blended gasoline will help reduce ozone. I respectfully ask that the U.S. EPA not preclude ethanol from playing a role in the fight for cleaner air.

Illinois and other ethanol producing states have made a commitment based on a belief that ethanol would be part of the national solution to our air pollution problems. We believe that Congress understood that ethanol would be a component in complying with the Clean Air Act Amendments of 1990.

In Illinois, this commitment can be seen in demonstration projects that test ethanol in various vehicles. Illinois' demonstrations currently include fourteen buses which will be operated on 95 percent ethanol by the Peoria Mass Transit District; a state fleet demonstration of twelve variable fueled Chevrolet Luminas which will use 85 percent ethanol; and a heavy duty truck fleet demonstration in cooperation with the U.S. Department of Energy, the Detroit Diesel company and ADM. Others in the Governors' Ethanol Coalition are undertaking similar and complementary research and demonstration projects in their own states.

The recent amendments to the Clean Air Act already threaten severe economic hardship in the Midwest, especially where Illinois basin coal is mined and burned. Higher electric rates and unemployment in the Midwest are the legacy of those amendments. Now, in response to the U.S. EPA rules excluding ethanol, the ethanol industry has indefinitely postponed plans to increase new production capacity by up to 350 million gallons per year. This would result in a loss of capital investment of about \$750 million and approximately 2,500 permanent jobs. It would have also meant an expanded market for American farmers.

It is crucial that the fledgling ethanol industry be given the chance to prove itself as a solution to urban pollution rather than being branded as a problem. U.S. EPA's simple models do not account for ethanol's benefits of reduced reactivity, carbon monoxide reduction and carbon dioxide recycling in the atmosphere. U.S. EPA will not have its more complex model available in time to allow ethanol to play a role in the reformulated gasoline markets. In the meantime, that agency has issued proposed regulations which essentially prohibit the use of domestically produced ethanol in meeting clean air act ozone standards.

**U.S. EPA actions that hinder the use of ethanol also have the dual effect of further increasing our dependence on foreign oil. In that respect, I would much rather be dependent on a corn farmer from the Midwest than an oil baron from the Mideast for my fuel.**

**On behalf of the Governors' Ethanol Coalition and the State of Illinois, I want to express our appreciation for the strong support for the ethanol industry which this committee has shown. Now, more than ever, your support and interest in ethanol as a viable alternative transportation fuel under the Clean Air Act is needed. We have a very short time frame to develop the scientific data and ensure that the rules and regulations for reformulated gasoline are fair for all fuels.**

**The adoption of these regulations, as they stand, severely threatens both the viability of the ethanol industry and the continued growth of the agricultural economy in Illinois and the nation. We will lose the economic, environmental and energy security benefits of the nation's only renewable, domestically produced transportation fuel.**

**Enclosed are studies from Illinois state executive departments which elaborate on the economic, energy and environmental benefits of ethanol as an alternative, renewable and domestically produced transportation fuel.**



STATE OF ILLINOIS  
**OFFICE OF THE GOVERNOR**  
SPRINGFIELD 62706

**JIM EDGAR**  
GOVERNOR

**Testimony Before the  
U.S. Environmental Protection Agency  
on Regulations of Fuels and Fuel Additives:  
Standards for Reformulated and Conventional Gasoline**

**By  
Jim Edgar, Governor  
State of Illinois**

**and**

**Vice Chairman  
Governors' Ethanol Coalition**

**Holiday Inn Centre  
Chicago, Illinois  
June 9, 1992**

U.S. EPA actions that hinder the use of ethanol also have the dual effect of further increasing our dependence on foreign oil. In that respect, I would much rather be dependent on a corn farmer from the Midwest than an oil baron from the Mideast for my fuel.

On behalf of the Governors' Ethanol Coalition and the State of Illinois, I want to express our appreciation for the strong support for the ethanol industry which this committee has shown. Now, more than ever, your support and interest in ethanol as a viable alternative transportation fuel under the Clean Air Act is needed. We have a very short time frame to develop the scientific data and ensure that the rules and regulations for reformulated gasoline are fair for all fuels.

The adoption of these regulations, as they stand, severely threatens both the viability of the ethanol industry and the continued growth of the agricultural economy in Illinois and the nation. We will lose the economic, environmental and energy security benefits of the nation's only renewable, domestically produced transportation fuel.

Enclosed are studies from Illinois state executive departments which elaborate on the economic, energy and environmental benefits of ethanol as an alternative, renewable and domestically produced transportation fuel.

We have a direct and vested interest in ensuring that appropriate decisions are made which help reduce the air pollution, especially in our urban centers. Both Chicago and the Metro-East St. Louis region of Illinois are in non-attainment for ozone. We will have to propose actions in both areas which reduce ozone to acceptable levels. We are committed to meeting the air requirements for our urban areas.

The Illinois ethanol industry, while modest and young by oil industry and utility standards, represents one opening among the economic clouds of the Clean Air Act for Illinois.

We believe ethanol is a clean fuel that can help this country meet the goals of the Clean Air Act. Ethanol is a fuel extender and an octane enhancer made from renewable resources. It can help reduce the tide of foreign oil imports, replace the octane lost as lead and other toxics are removed from gasoline, and finally help clean up forty carbon monoxide non-attainment cities throughout the nation.

Ethanol should be allowed to compete in the reformulated gasoline market based upon research that its use will not create ozone problems. In fact, recent research not only contradicts fears about ethanol, but indicates ethanol will help reduce ozone problems.

This recent research is especially important to recognizing fact from fiction - hypothesis versus reality. We believe reformulated gasoline blended with 10 percent ethanol performs well in reducing ozone.

Dr. Gary Whitten of Systems Applications International, will present information during this hearing about ozone studies conducted in St. Louis, New York City and Chicago specifically directed at the question of 10 percent ethanol.

The use of ethanol to improve air quality is not new. It has already been used to reduce carbon monoxide by 20 percent in non-attainment areas. Ethanol is the nation's only renewable motor fuel. It is made from plants which recycle carbon dioxide.

The bottom line question today is: Do 10 percent ethanol blends cause the formation of ozone? The goal of the Clean Air Act is to reduce ozone. Today, the assumptions against ethanol are based on atmospheric models. This modeling is inadequate and yet this simple approach is greatly damaging ethanol's future.

The State of Illinois, its ethanol industry, and agriculture interests have been willing to put time and resources toward the development of more complex modeling techniques which take into account the chemical reactivity of the emissions as well as their size. Further, the State of Illinois is willing to consider the results of that research to identify alternatives for ozone reduction in urban areas.

As I mentioned earlier, Dr. Whitten has conducted research on models which more accurately predict ozone production in areas where 10 percent blends of ethanol are part of reformulated fuels. The results of his research in the Chicago Metropolitan Area are that 10 percent ethanol blends with reformulated gasoline performed well compared with other reformulated gasoline in ozone reduction. Dr. Whitten will describe his research in further detail.

In summary, when the Clean Air Act Amendments were being negotiated by Congress, many states, environmentalists, and alternative energy advocates thought one of the important purposes of the Act was to encourage the production and use of clean alternative fuels to improve the air quality of our cities, and reduce our dependence on foreign oil.

During the process, a central feature of reformulated gasoline became low volatility. Although clean burning, ethanol was severely restricted from competition because of the high volatility of ethanol blends. I do not believe that this result matches Congressional intent.

There are serious consequences to your decisions and actions. Before this nation takes action that may curtail the further development of this renewable fuel, I urge you to examine the recent data. I ask you to look for ways to craft these regulations so as not to preclude 10 percent ethanol blends from competing in the reformulated gasoline market. Thank you.

Now it is my privilege to introduce the next speaker. One year ago, Governor Ben Nelson of Nebraska asked me if I would be interested in forming with him a coalition of Governors interested in promotion and marketing of ethanol.

As a result of Governor Nelson's good efforts, Illinois and 15 other states make up the Governors' Ethanol Coalition. Under his leadership, the coalition has done a good job focusing the public policy debate on ethanol. Ladies and gentlemen, let me introduce the Governor of the state of Nebraska, the Honorable Ben Nelson.

# NEWS



From the Office of  
THE GOVERNOR

FOR IMMEDIATE RELEASE  
April 29, 1992

Contact: 217/782-7355

**EDGAR URGES CONGRESS  
TO HELP SPIKE EFFORTS  
TO RESTRICT ETHANOL USE**

WASHINGTON, D.C. -- Gov. Jim Edgar today urged a House subcommittee to join the fight against proposed restrictions on the sale of ethanol blended gasoline.

"It is crucial that the developing ethanol industry be given the chance to prove its value in reducing urban pollution," the Governor said in testimony before a subcommittee of the House Agriculture Committee.

"The use of ethanol as a transportation fuel is a very important economic issue throughout the nation, but is particularly critical in my state. Illinois produces more than one-half of the nation's one billion gallons of ethanol....Fully 17 percent of the corn grown in Illinois is used in the production of ethanol," Edgar said.

"It is estimated about 10,000 people -- excluding corn growers -- are employed nationwide directly or indirectly by the ethanol industry."

The Governor took strong exception to proposed rules by the U.S. Environmental Protection Agency to bar the sale of ethanol blended fuel in urban areas that have high ozone levels. The

EDGAR/2222

agency has maintained ethanol aggravates ozone problems, but Edgar argued that studies have shown the opposite.

"Ten percent blends of ethanol demonstrated in Denver, Phoenix and other cities that carbon monoxide levels can be reduced an average of 20 percent. In Chicago, where nearly one-third of the gasoline is blended with ethanol, carbon monoxide levels have declined to a point where today they remain well below the standards set by the EPA," the Governor said.

Edgar is vice chairman of the Governors' Ethanol Coalition, which includes governors of 16 states and is chaired by Nebraska Gov. Ben Nelson.

The Illinois chief executive was accompanied to the subcommittee hearing by John White, president of the Illinois Farm Bureau; Scott Durbin, president of the Illinois Corn Growers Association, and Becky Doyle, director of the Illinois Department of Agriculture.

Also joining Edgar was U.S. Rep. Tom Ewing (R-Ill.), another leading advocate of the ethanol fuel.

Ewing said, "Expanded use of ethanol is not only good for Illinois farmers who need markets for corn products, but ethanol can help improve our environment and reduce our dependence on foreign energy sources.

"It was the intent of Congress that the Clean Air Act would allow ethanol to compete with other alternative fuels to clean up our nation's air, and the proposed EPA regulations do not

(more)

EDGAR/3333

honor that intent. It is critical that regulations be written which will allow ethanol to fairly compete with other alternative fuels. How this issue is resolved will have a profound effect on Illinois agriculture and the Illinois economy for many years to come."

The federal EPA is attacking the use of ethanol in proposed rules to implement revisions to the Clean Air Act.

Edgar has supported higher air quality standards but has urged that they be implemented without causing undue economic hardship to Illinois and other coal-producing states.

In his testimony to the House subcommittee, the Governor said the proposed ban on ethanol use in many large cities would heap economic injury upon economic injury.

"The ethanol industry has indefinitely postponed plans to increase new production capacity by up to 350 million gallons a year -- 70 percent of that in Illinois. This translates into \$750 million in loss of capital investment and about 2,500 jobs," Edgar said.

He added the blow to the ethanol industry undermines the nation's efforts to reduce its energy dependence on foreign nations.

"I would much rather be dependent on a corn farmer from the Midwest than on an oil baron from the Mideast," Edgar said.

###

WED  
5-27-92

## Voice of the People

Tribe. 5-27-92 DA

# Ethanol is good for business and air

**SPRINGFIELD**—Your May 12 editorial criticizing my support for ethanol in testimony before the U.S. Congress could have come straight from the Big Oil propaganda presses.

Your assertion that ethanol is a dirty fuel defies understanding. Studies in Denver, Phoenix and other cities show that use of ethanol-blended fuel can reduce carbon monoxide emissions by an average of 20 percent. In Chicago, nearly one-third of the gasoline is blended with ethanol, and carbon monoxide levels have fallen below federal Environmental Protection Agency standards. At the same time, carbon monoxide levels have exceeded the standards in nearly 40 other cities in which ethanol is not as widely used.

Moreover, ethanol reduces carbon dioxide—the main culprit in global warming.

Despite that evidence, bureaucrats at the U.S. Environmental Protection Agency—with Big Oil eggging them on—have moved to prematurely exclude ethanol as a clean fuel option. And I—armed with scientific data—went before the Congress to urge that the bureaucrats be blocked.

Many experts simply do not buy—as you do—the false notion that ethanol's higher volatility helps create unhealthy ozone. They cite a New York City study that indicates reformulated gasoline blended with 10 percent ethanol performs equally well in reducing ozone as does the oxygenate approved by the federal EPA. We are confident that ongoing research coordinated with the Lake Michigan Ozone Study will show similar results for ethanol-blended fuels.

Ethanol is clearly a clean fuel with environmental benefits for the nation and

economic benefits for Illinois. The curtailing of the ethanol industry's growth hurts farmers, construction workers, plant workers and Illinois taxpayers.

Illinois produces more ethanol than any other state. The 500 million gallons of ethanol annually produced in Illinois add about \$600 million to our gross state product. More than 5,000 jobs have been created in ethanol production, not counting the thousands of farmers who supply the raw materials. Seventeen percent—or 195 million bushels—of Illinois' annual corn production is used in the production of ethanol, which is of great consequence to the Chicago Board of Trade.

Your position that the doubling of ethanol sales would only negligibly reduce our nation's dependence on foreign oil is shortsighted at best. Most of the \$2 billion paid by consumers for ethanol will stay in the domestic economy. Gasoline produced from imported oil sends much needed capital out of our country.

Further, substituting two-billion gallons of domestically produced, renewable ethanol for imported fuel helps increase our energy security and reduce our balance of trade deficit—12 percent of which is attributable to the use of imported oil.

By giving ethanol a fair shot in the marketplace, we can improve Chicago's air quality, create jobs in Illinois and help move the nation closer to energy independence. Big Oil may not like it, but what is good for Big Oil is not necessarily what is good for Illinois or for America.

Gov. Jim Edgar

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^Reilly: EPA Not Considering Ethanol Waiver

^By MIKE GLOVER

^Associated Press Writers

HOUSTON (AP) - In a blow to corn-producing states, Environmental Protection Agency head William Reilly said his agency won't grant broad tax incentives designed to promote use of ethanol-blended fuels.

He said some modest incentives were being considered, and could be announced within a few days. The larger program eagerly sought by Midwestern politicians has been ruled out, he said.

Ethanol fuels are derived from corn and are considered a potential major new product by farmers. The environmental agency has said in a preliminary finding that ethanol pollutes more than other fuels, but that is disputed by farm interests.

Reilly insisted that the Bush Administration was committed to expanding use of the fuels but "we don't need to relax the Clean Air Act to do that."

"We're going to make sure that we protect the environment and that we also promote the farmers," Reilly said. "They'll each reinforce the other."

His comments came during an interview after his speech to the Republican National Convention.

Midwestern politicians were predictably angry, saying they have been pressuring administration officials throughout the convention.

"There was never an indication of that decision," said David Roederer, top aide to Iowa GOP Gov. Terry Branstad. "That answer is not acceptable."

It had been widely anticipated that Reilly would use his speech to announce that the EPA was granting new incentives for the use of ethanol-blended fuels.

At issue is a special waiver the EPA must grant to allow broad tax breaks on the fuel in the nation's most polluted cities.

Ethanol has become a political issue as well. Democrat Bill Clinton argued for expanded ethanol use during a recent bus swing through the Midwest.

Republican politicians in the region have warned that President Bush will suffer if he doesn't reverse field.

After his speech, Reilly was asked about the issue and said: "Well, if you're talking about giving a waiver for ... ethanol, we are not considering that. I don't think the science supports it, and I don't think I have legal authority to do it."

The complex issue has drawn little attention outside the Midwest, but close scrutiny there.

Reilly defended the administration's record, and said some initiatives would be announced quickly.

"We have some ideas about how we're going to promote more ethanol use, and we'll be getting into those in the next few days," he said. "The president, I think, is going to do that."

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U. S. ENVIRONMENTAL PROTECTION AGENCY  
Office of External Relations and Education  
Washington, D. C. 20460



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 AP-Rellly-Ethanol  
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 BY MIKE GLOVER  
 Associated Press Writer  
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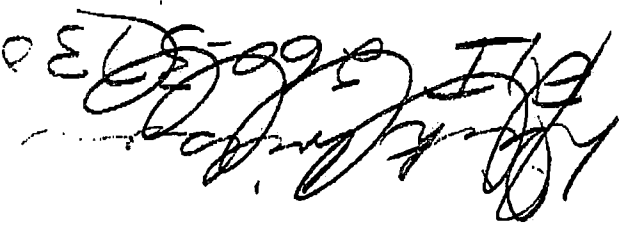
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WENDY



# Mechanical failure

*Midwestern manufacturers are bracing for recession's return*

**E**xecutives of Harbison-Walker Refractories came to Washington, D.C., last May to accept the president's "E" Award for Excellence in Exporting, but workers 800 miles away at the company's plant in Vandalia, Mo., were hardly in a mood to celebrate. The Harbison plant, which makes furnace linings for steel and other industries, was being forced to shut down its kiln and idle three quarters of its 200-person work force for three weeks—its first such closing ever. Cast adrift, Harbison's furloughed employees were stunned by their fate. After struggling through 10 months of nasty recession, Midwestern manufacturing appeared to be rebounding last spring, but harsh reality suddenly set in and has since enveloped the industrial heartland. It "looked like a typical recovery," says Paul O'Neill, chief executive officer of Alcoa in Pittsburgh. "Then the world fell off a cliff." Adds Thomas McKeon, president of the sales division of Blandin Paper Co. in Grand Rapids, Minn., "I haven't seen business as bad as it is now in 30 years."

Many Midwestern manufacturers believe that their regional economy could easily slip back into recession. And with good reason. The industrial production index has barely budged this fall, and factory capacity is now at the lowest level—79.6 percent—of the past four months. With production stalled and plant utilization down, thousands more workers are sure to face unemployment. In October, the nation lost 32,000 manufacturing jobs after gaining a total of 18,000 in the third quarter. Rising joblessness has led to sluggish income growth. The government last week reported that wages and salaries actually fell by 0.2 percent in October. And, with credit tight and consumer confidence plummeting to near record lows, purchases of durable manufactured goods have

slumped. During mid-November, for example, sales of domestic cars and light trucks were down 18.7 percent from a year earlier.

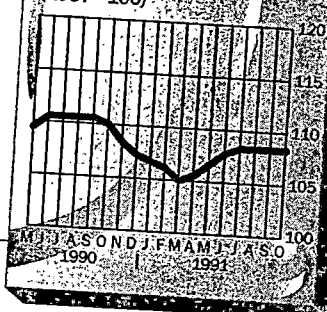
Even exports, which have bolstered the industrial sector over the past several years, have begun to show signs of weakness. Export growth during 1991 has slowed to just over 3 percent, half of what it was a year ago, largely because the powerful economies of both

## Holding on in the heartland

After briefly recovering last spring, America's critical manufacturing sector may now be slipping back into the grip of recession as car sales plummet and exports soften because of weak overseas demand.



Industrial production index, total industry (1987=100)



Japan and Germany are cooling off.

Despite their fears, most manufacturers have coped with far tougher times in the past. During the recession of 1981-82, industrial companies lost 2.1 million jobs, nearly triple the 786,000 positions cut since July 1990. One main difference between then and now is America's sharpened competitiveness.

A stronger trade balance has provided a cushion this time, says Jill Thomson, a senior economist at DRI/McGraw-Hill. Also bolstering manufacturing today is the extensive belt tightening that firms were forced to undergo during the 1980s. This corporate restructuring has led to gains in industrial productivity.

The most notable casualty of the manufacturing downturn has been the decimated auto industry. In the third quarter of this year, General Motors, Ford and Chrysler lost a combined \$1.76 billion, compared with just \$3 million in total losses during the third quarter of 1990. Auto makers will now be forced to shut down additional plants.

Closely dependent upon Detroit is the steel industry, which has seen production slide by about 12 percent in 1991 compared with 1990. LTV, Bethlehem Steel and Inland Steel all were hit with losses in the third quarter, and USX reported a measly profit of just \$5 million, a drop of 94 percent from the same period last year.

As the recession ripples down the supply chain, layoffs have occurred at such raw material producers as Eveleth Mines in northern Minnesota, which processes iron ore for steel. Just as there was "some optimism that things would come back," says Eveleth General Manager Dick Harmon, 600 of the company's 728 workers had to be idled for three weeks. Manufacturers in a number of other industries have also been hurt. The \$26 million Blandin Paper Co., for instance, has had to offer sizable discounts just to maintain its business.

Jerry Jerome, president of Jerome Foods in Barron, Wis., is also cutting prices. Demand for Jerome's turkeys usually peaks during the holiday season, but the poultry producer has been forced by frugal consumers to sell his birds for 16 percent less this year. Like so many worried executives and workers in America's industrial heartland today, Jerry Jerome knows firsthand just how foul the nation's economy has become. ■

BY RICHARD J. NEWMAN  
AND SARA COLLINS

# Cat claws its way to the future

## Peoria's pride is targeting labor costs

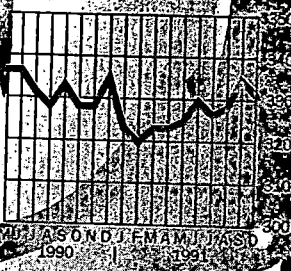
Like Coca-Cola, Caterpillar is an American icon. Its familiar yellow machines are respected the world over for their dependability, quality and strength. Generators powered by Caterpillar diesel engines today supply electricity for war-ravaged Kuwait. In Japan, immense Caterpillar bulldozers are carving out a major new airport. But inside building SS in East Peoria, Ill., where Caterpillar builds bulldozers that sell abroad for upward of \$1 million apiece, the factory line is still. At the plant gate, a clutch of grizzled workers wearing "I'm sticking with the Union" buttons huddles near a 55-gallon drum filled with blazing timbers.

The United Auto Workers selectively struck two Caterpillar plants with 2,400 workers in early November when contract negotiations broke down. The company quickly responded by locking out 5,600 more laborers at other facilities, and no one expects work to resume soon. "Everyone prepared for this," explains picketer Dennis Lindo, who in better times assembles radiators for the giant tractors. "We've saved money and cut down our bills. We're looking at a four-monther, at least."

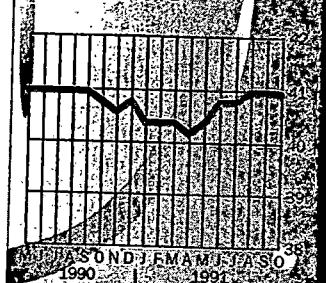
**Busting the union?** Labor negotiations at the world's largest manufacturer of earthmoving, materials-handling and construction equipment nearly always are marked by walkouts; the longest, in 1982, lasted 205 days. But this is no ordinary strike. This time, charges Jerry Brown, president of UAW Local 974, the largest of seven locals involved, "I think they are hellbent on busting the union." At Caterpillar's Peoria headquarters, chief company negotiator Jerry Brust sees it differently. "We've got to bargain a contract that allows us some promise of continuing to compete for five or 10 years to come," he says. But if Cat gains the concessions it wants, the outcome could reverberate far beyond its factory gates.

Caterpillar's management, as tough as its machinery, seeks to end two key

Average weekly earnings  
manufacturing  
(1982 dollars)



Average weekly hours  
manufacturing



## BUSINESS

practices that have been the foundation of UAW strength. The first is "pattern bargaining," in which a contract negotiated at one company is expected to be followed by its competitors in the same industry. The UAW wants Cat to accept the terms of a contract recently cut with Deere & Co., which makes agricultural and construction equipment; Caterpillar claims that Deere's situation isn't comparable because as a major U.S.

exporter Cat needs to control costs to compete globally. Caterpillar also wants to negotiate different agreements for each of its newly formed profit centers rather than a central contract that covers all seven UAW locals. This, says the union, is a "divide and conquer" strategy.

**Piling up losses.** For nearly a year, Caterpillar has laid the groundwork for the current confrontation. Since February, it has run a series of newspaper ads outlining its positions, warning pointedly that if it didn't remain competitive it could lose business to foreign rivals like Japan's Komatsu Ltd., shift production to different facilities or buy more parts from other companies. Workers have been bombarded by company mailings. Inventories have been built up so sales could continue during a strike. And given the current worldwide construction slowdown, those inventories could last quite a while: Sales have dropped so sharply that Cat reported a loss of \$86 million for the first three quarters of 1991 and warned that fourth-



Striking out. Cat's workers walk the picket line.

quarter losses would top that figure.

UAW workers at Caterpillar's factories have long enjoyed pay and benefits that are the envy of those who work in many other Midwestern plants. "We're not suggesting we want to cut wages," Brust says, just slow the rate of increase. "We've invested in technology so we can be productive with highly paid, highly skilled employees. But there is a limit to it." Cat's last proposal to the UAW would raise average hourly wages from \$16.98 to \$18.97 over three years. With all health and pension benefits included, the hourly average would rise from \$32.35 to \$37.50—slightly ahead of the anticipated inflation rate. But since the offer did not include pattern bargaining and a strong central agreement, the UAW rejected it after a four-minute caucus.

As a large net exporter of American-made products, Caterpillar argues that labor agreements must reflect its status as a major international competitor. In 1990, Caterpillar sales totaled \$11.1 bil-

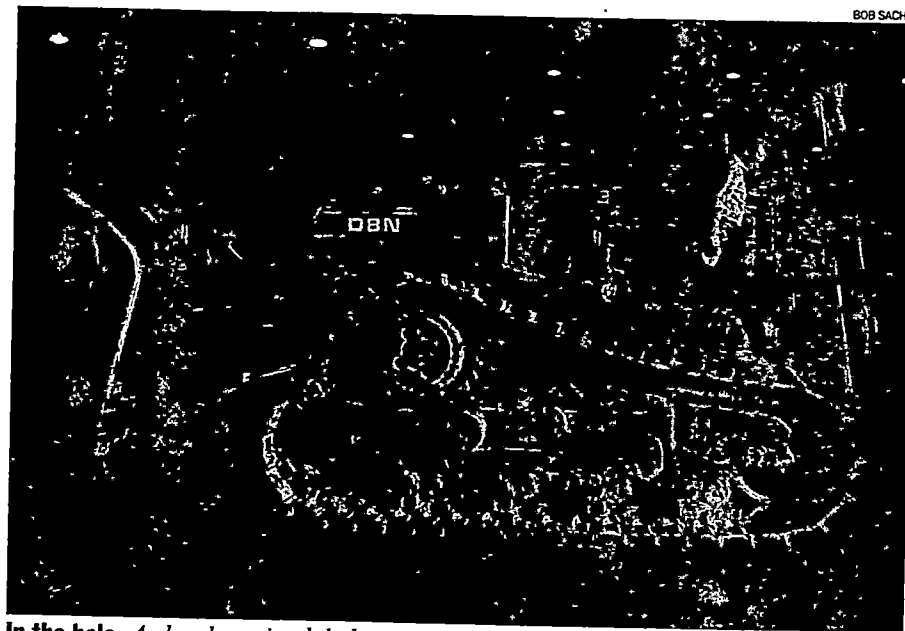
lion, of which a record \$6 billion was earned overseas. Although nearly half of Cat's foreign sales came from 15 plants outside the United States, 17 American factories exported \$3.4 billion worth of machines that supported 18,500 jobs. Even when Cat's imports of parts and machines are taken into account, the company contributed \$1.9 billion to the nation's trade balance.

Caterpillar first got serious about competition a decade ago. For half a century until 1982, the company had turned a profit every year as buyers lined up for its equipment. Then, with the severe recession that followed the oil shocks, its familiar world ended. Huge public-works projects that used lots of Cat equipment evaporated, and, at the same time, Komatsu mounted a challenge with high-quality earth-movers. Cat slashed prices to hold its share of a declining market, losing nearly \$1 billion between 1982 and 1984.

**Shutting factories.** Since then, Cat's chastened executives have transformed the way the company does business. By closing plants and purchasing many parts rather than making every bolt and screw itself, Caterpillar cut employment in the Peoria area from 36,000 to 17,000. The five-year, \$2.1 billion "Plant With a Future" program, to be completed in 1993, aims to install the latest manufacturing systems. Already, quality is up—"You won't find any sledgehammers on the line anymore," says one worker—and at the plant in Decatur, Ill., the time required to make a motor grader has been cut from 20 days to five. Last year, the company shed its old-fashioned functional organization, where no one had clear responsibility to make money, and substituted profit centers, each geared to a product line and set of customers.

Restructuring labor agreements to reduce costs is the last step in Cat's campaign for competitiveness, and it may be the hardest of all to achieve. Even though pattern bargaining disappeared in the 1980s in other major industries like paper, meatpacking, trucking and rubber, Caterpillar is clearly a vigorous competitor whose market shares have been rising under the present labor agreement in nearly every equipment line, according to *Machinery Outlook*, an industry newsletter. The UAW is also strong, and it has a big strike fund. In addition, many of its Caterpillar members are older men who successfully weathered the long 1982 strike. "This," says picketer Dennis Lindo, "is not my first rodeo." Neither, however, is it Caterpillar's. ■

BY WILLIAM J. COOK



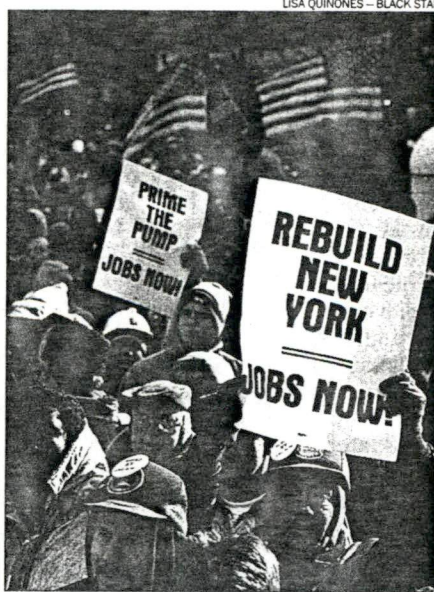
In the hole. A slowdown in global construction has hurt Caterpillar's profits.

# THE 'AMERICA FIRST' CAMPAIGN '92 FALLACIES

*New cries for protectionism and isolationism are coming from Congress, and the campaign trail and key policies are already being affected. But these sentiments rest on misleading myths*

**R**epublican presidential candidate Patrick Buchanan brands George Bush a wrongheaded globalist who "would put America's wealth and power at the service of some vague new world order." Instead, Buchanan wants to "put America first." Democratic Sen. Tom Harkin, another presidential hopeful, says he's proud to be called a protectionist. Democratic Sen. Bob Kerrey picks up the theme: "If I'm president, the time for begging is through. I'll tell Japan that if we can't sell in their market, they can't sell in ours."

The voices of isolationism and protectionism are on the rise — spawned by the recession and America's search for scapegoats. The movement is much more than talk. Last week, the Los Angeles County Transportation Commission, responding to public outrage, canceled Japan-based Sumitomo Corp.'s \$121 million contract to build rail cars for the city.



**Rally 'round.** Voters demand attention.

The commission said it wanted to keep the jobs at home. In Seattle, plans to buy the Mariners baseball team by a group led by Japanese investors set off a debate about whether the franchise should be moved to St. Petersburg, Fla., to keep it in American hands. In Congress, House Majority Leader Richard Gephardt again introduced a protectionist trade package that would require Japan to eliminate its trade surplus with the United States within five years or face deep cuts in Japanese car imports.

The president, clearly, is listening. Bush still can point to major initiatives to prove his bona fides as an internationalist: Last week, he proposed \$645 million in new assistance for Russia and the other former Soviet republics over the next two years. And he is still nurturing Middle East peace talks, despite growing apprehensions in the White House. Overall, though, Bush has been timid about confronting the "America first" crowd and is allowing overblown fears of an isolationist, election-year backlash to shape some key decisions:

■ **Far East debacle.** Bush badly overreacted to Democrat Harris Wofford's victory last fall in Pennsylvania's Senate race. Misreading the potency of Wofford's slogan—"It's time to take care of our own"—Bush postponed his long-scheduled Far East trip, then rebilled it as a job-creating mission. It failed. Instead of opening new markets or breaking down trade barriers, Bush won a handful of concessions for U.S. auto makers, including Japan's tentative agreement to buy 20,000 U.S. cars or \$10 billion worth of auto parts. Later, Japanese Prime Minister Kiichi Miyazawa backpedaled, saying he was offering a target, not a pledge.

■ **Kid-gloves trade policy.** The "Uruguay Round" of international trade talks is stalled primarily because European nations refuse to reduce sharply their government subsidies for agricultural products. But Bush's credibility as a free trader was badly damaged by the impression he left in Japan that he was anxious for managed-trade arrangements. That seriously weakened America's voice at the GATT talks.

On another front, Bush says he is still committed to building a free-trade zone that would include the United States, Canada and Mexico. Critics contend the administration won't complete negotiations on it until after the November election, so that Bush can avoid election-year charges that he is encouraging a shift of U.S. jobs south of the border. Administration officials say they are moving ahead steadily, but qui-

## ■ U.S. NEWS

etly. "What we're going to do when we have to bring it to the Congress may be another question," says a top aide.

■ **Debt and dues blues.** The administration's best intentions on Latin American debt relief and funding for the International Monetary Fund are being put on hold. Bush did not fight when Congress slashed his Latin debt-relief proposal, even though it would measurably help the move to build free-market economies. And while he wants the IMF to underwrite structural reform in Russia, the White House has decided not to fight Congress for a \$12.2 billion IMF replenishment.

It is true that there is an overwhelming logic now for the nation to be refocusing its attention inward. The end of the Soviet threat makes it reasonable for America to contract its military and nuclear forces and to insist that other nations share the burden. In Europe, that means the United States is expected to reduce its force level to about 75,000—half of what is now planned, and down from the current total of 240,000. Japan, on the other hand, will boost its payments from \$3 billion annually to \$3.8 billion by 1995 to pay the full costs of keeping American troops there.

Yet the proponents of the America-first strategy—on the left and on the right—want a retreat that goes way beyond those adjustments. As Buchanan puts it: "Why must we pacify the Persian Gulf, when women walking dogs in Central Park are slashed to death by bums?" As campaign talk, that's compelling. As a basis for making policy, it rests on some basic myths about what Americans want and what's best for the nation.

### MYTH ONE

## AMERICANS ARE ESPECIALLY ISOLATIONIST NOW

**P**residential politics is not about nuance. And in a state like New Hampshire, hard hit by the recession, simple sentiments are particularly appealing. The candidates see citizens keenly aware that the nation is losing ground and often complaining that Japan has a lot to do with it. People are angry, looking for leaders to make things better. And so the politicians come out swinging, implying that revenge is the way to make sure Americans get jobs, jobs, jobs. Sounds great, but there is one small problem: Pro-

tectionism is not what the voters want.

Unlike most of the candidates, the voters do *not* blame the problem solely on the competition. When they hear Buchanan rail about "America First," they are not thinking about turning nationalist or isolationist. "They are saying life is a matter of priorities," says Democratic pollster Geoffrey Garin. "And the priority now is rebuilding America."



Worldwide tilt. The U.S. economy stretches far.

Voters do not want to keep the status quo, and that is a big problem for Bush. But the challenge for the candidates—so far largely unmet—is to try to appeal to a public that believes the nation's problems are caused by a complex set of circumstances, both at home and abroad. Voters have grown increasingly cynical about a nation they believe has not been smart enough about its approach to business and not concerned enough about issues like education to compete adequately. They want fairness in both trade and foreign policy but understand it would be counterproductive to dismantle either. In fact, a recent Gallup Poll showed that 71 percent of

all Americans want the nation to "take an active part in world affairs"—the highest such number in 26 years.

While Japan is not seen as a friendly trader, the public does not view it as the source of all evil. One recent survey for the Council on Competitiveness, for instance, showed that while a majority of Americans think Japan "breaks the rules of fair trade," most also look

home when searching for the roots of economic failure. More than half of those surveyed, for example, said that American business is "too concerned with short-term profit rather than long-term investment." To the question why America has "problems competing economically," the first-ranking response—from 41 percent—was that "the world has changed to become a global marketplace, and the United States hasn't done enough to adjust to the new challenges of economic competition."

Of course, America-bashing is not always politically useful, especially for Democrats courting an essential swing voting bloc: men under 35 who are highly patriotic. Recently, they have abandoned the Democrats. In the last two presidential elections, they wanted a president to stand up and be tough. Now, these voters are both fearful and resentful of the current economic morass. With the demise of the communist menace, they are looking for a candi-

date who offers a real path toward economic security. Paul Tsongas of Massachusetts has been trying to offer an industrial policy, and, while he is not likely to become the Democratic nominee, he is currently running second in New Hampshire.

As always, solutions need to progress beyond slogans, even in a presidential campaign. "What's bothering people," says GOP strategist Ed Rollins, "is that they want to know how we can compete." By nature, Americans have always been most interested in taking care of business at home. But in so doing, they do not want to withdraw from the rest of the world.

★★★

**PERCENTAGE OF AMERICANS WHO SAY JAPANESE FIRMS COMPETE UNFAIRLY: 37. PERCENTAGE WHO SAY WE BLAME JAPAN FOR OUR OWN PROBLEMS: 52.**

## MYTH TWO

# PUTTING AMERICA FIRST MEANS PLACING JAPAN LAST

**P**atrick Buchanan promises to be “an ‘America first’ president” who would “stand up to the tough-minded nationalists looking out for Japan.” Paul Tsongas advocates buying American: “If you have a [Chrysler] Jeep and an Isuzu, I’m saying, ‘Buy the Jeep.’” Never mind that 38 percent of Isuzu is owned by General Motors; these stump speeches are designed to cast Japan as this year’s Willie Horton—the stealthy nation that swipes the jobs of unsuspecting Americans.

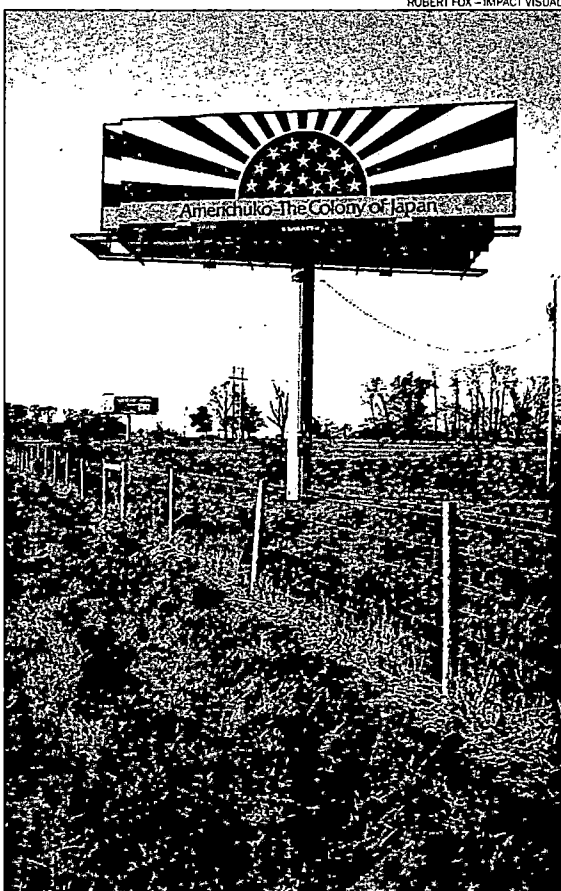
Yet the rhetoric of economic nationalism ignores a stark reality. Japan’s current trade surplus with America is \$43 billion, but Japanese companies’ direct investments in U.S. firms and other properties now total roughly \$84 billion. Those stakes will climb far higher in the future, partly because of America’s persistent deficits. As these investment flows and other forces draw the two economies closer, it will become harder to distinguish U.S. interests from Japan’s—belying the bluster of campaign ’92.

Although ill understood by politicians, the growing economic symbiosis between the United States and Japan stems mainly from each nation’s long-standing habits—some constructive, others dangerous. America’s huge government deficits and low private savings yield a national savings rate of just 3 percent, well below the level of private investment. The result is a so-called balance-of-payments deficit that must be financed abroad by selling everything from Treasury bonds to real estate and corporate stock. In effect, this means America consumes more than it produces, triggering a flood of imports. Meanwhile, Japan’s lofty 15 percent national savings rate exceeds even its staggering level of domestic investment, leaving plenty of excess capital to be invested overseas. Since Japan’s state-of-the-art manufacturing firms also make products Americans want, the nation has become the largest source of imports into the United States.

This relationship would be a match made in heaven, except for two nasty side effects: It produces the politically explosive U.S. trade deficit, and it leads inexorably to a steady sell-off of U.S. assets. Yet few of the candidates suggest attacking the macroeconomic roots of these problems by reining in U.S. government spending and boosting domestic savings.

Instead, most of them focus on the lesser microeconomic causes of the trade deficit, such as Japanese trade barriers to U.S. exports—in effect, placing all the blame on Japan. For example, Democrat Tom Harkin embraces a plan pushed by House Majority Leader Richard Gephardt: It would slash sales of Japanese cars in the United States by 250,000 a year unless Japan cut its trade surplus

about \$2,500 to a whopping \$98,000 per job to attract the auto makers in the first place. Including positions at supplier firms, the transplants may have created more than 110,000 jobs, many in companies transformed by the Japanese-induced quality revolution. “How could you say ‘You must stop doing that’ to companies that are investing billions of dollars in rebuilding your industrial environment?” Florida asks. Indeed, for much of U.S. industry, “standing up to Japan” isn’t the point. Sitting down to negotiate more investment from Japanese companies is more like it.



Foreign investment. Controversial—but inevitable

with America by 20 percent annually over the next five years.

Yet Gephardt’s bill is unlikely to be enacted. Japan’s U.S. car sales—which now total about a third of the American car market—couldn’t be curbed without inflaming U.S. interests as well as Japanese. Eight major Japanese auto makers, ranging from Honda to Subaru, have sunk a total of roughly \$9 billion into their U.S. plants spread across eight populous states, notes Carnegie Mellon University management expert Richard Florida. These “transplants” employ about 30,000 American workers—jobs so sought after that states like Ohio, Kentucky and Indiana granted subsidies ranging from

preached free trade while extending import quotas on steel and machine tools. Besides signing on to more managed-trade deals with Japan, Bush has also begun referring to the proposed free-trade agreement with Mexico as the “fair trade” treaty—adopting new-speak normally used by protectionists

to justify trade barriers.

Not only could these trade tirades impede market-opening measures; they also foster the false impression that America’s declining competitiveness stems mainly from getting a raw deal in global markets. Statistics do not support that view. From 1980 to 1990, total world exports grew from roughly \$2 trillion to \$3.4

## MYTH THREE

# TRADE ALONE IS THE KEY TO SUCCESS

**T**o Democratic presidential candidate Bob Kerrey, “the world economy is like a hockey game”—and America’s poor defense of its home market “goal” has “cost us jobs and destroyed companies.” Pat Buchanan, who once pushed for passage of the U.S.-Canada free-trade agreement, has now undergone a conversion: “You can no longer say that free trade, free trade, free trade is the answer to everything,” he asserts. These attacks from left and right seem to have further confused President Bush, who in the past has

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MORE THAN 110,000  
AMERICANS.**

## ■ U.S. NEWS

trillion, an increase of nearly 70 percent. At the same time, the U.S. share of those exports rose from 11.2 percent to just 11.6 percent, after temporarily declining in the middle of the decade because of the dollar's high value. In effect, America's world market share barely budged—at a time when overall trade was booming and global markets arguably were becoming more open.

**Economic chokepoint.** Clearly, something much more fundamental than foreign trade barriers has been hobbling U.S. exports and sapping competitiveness. Many American industries have simply been beaten by foreign competitors better able to innovate, cut production costs and improve quality. A case in point is the U.S. steel industry, large portions of which are still foundering despite decades of government-sanctioned trade protection. The industry now needs an estimated \$10 billion to \$15 billion in state-of-the-art manufacturing equipment simply to bring its products up to the level demanded by the Japanese auto transplants. By alleviating pressure on the industry to innovate sooner, says James Bovard, author of "The Fair Trade Fraud," in effect, "the federal government has succeeded in turning steel into a chokepoint on the American economy."

That object lesson notwithstanding, the government continues to attack declining competitiveness mainly as a trade problem—either by pressing to open foreign markets or by erecting barriers to foreign goods. Last year, for example, the U.S. International Trade Commission imposed duties on imports of flat-panel displays used in laptop computers, arguing that they were being sold at prices below the cost of production and were harming U.S. display manufacturers. One small problem: There is no real flat-panel-display industry in the United States, since large American manufacturers were never able to emulate the defect-free production methods perfected by firms like Sony Corp. So far, the ruling's key effect has been to raise costs for U.S. computer makers like IBM and Apple and to prompt them to shift some production overseas.

Recognizing the foibles of past trade policies, candidates Paul Tsongas and Bill Clinton have argued for broader moves to foster competitiveness, such as targeted capital-gains-tax cuts to spur investment. In his proposed budget for fiscal 1993, President Bush will also advance some favored solutions, including stepped-up federal support for research

and development in areas like high-performance computing. Ultimately, such efforts to rebuild U.S. industry from the ground up could prove vastly more rewarding than suicidal steps on trade.

### MYTH FOUR

## AMERICA WASTES TOO MUCH MONEY ON FOREIGN AID

**T**here are two myths at work here: First, that the United States government spends a large chunk of its budget each year on foreign aid. And second, that most of what it spends is squandered on worthless projects or stolen by corrupt foreign officials.

Seventy percent of Americans polled say they believe 10 percent or more of the federal budget goes to foreign aid; nearly half say aid consumes at least a quarter of the budget. In fact, America spent \$16 billion for economic and military aid in fiscal 1991, only a little over 1 percent of total federal spending—less than almost every other developed country except Austria, according to Yale University political scientist David Lumsdaine.

America's aid programs have had bouts of malfeasance—food-aid money used to build a tennis court in Rwanda; animal feed delivered as powdered milk to Sudan. But corruption isn't the norm, and U.S. aid has helped wipe out smallpox, reduce infant mortality and underwrite the "green revolution" in agricultural science that has helped boost food production in the Third World.

The real problem with America's foreign-aid program is that it is still fighting the cold war. Most of what Washington will spend on aid this year will go either to containing a defunct communist threat or to maintaining the 1979 Camp David Accords. More than half of the Bush administration's foreign-aid request for fiscal 1992 is devoted to military aid or "security related" needs. One third, \$5.27 billion, is for Israel and Egypt. An additional \$1.12 billion is allotted to North Atlantic Treaty Organization members Turkey, Greece and Portugal.

Meanwhile, for fiscal 1992, the administration will send just \$400 million to Eastern Europe, and—bowing to pressure from Congress and the European allies—now proposes to spend \$985 million on the former Soviet republics. Latin America's debtor nations and Africa's



Crying out for reform. Most U.S. foreign-aid

object poor will have to compete even harder for a share of the aid budget.

For the moment, the administration is robbing Peter to pay Paul. "I can find the extra \$100 million or \$200 million" for humanitarian aid to the former Soviet republics, says a top U.S. official. "But

when it looks like the West has to pony up \$10 billion to \$15 billion [to finance structural reforms] I honestly don't know where [it's] going to come from." Big money, the official admits, would have to come out of the aid budgets for Israel, Egypt and the three NATO recipients.

Efforts to reform foreign aid are bogged down in a power struggle between the

★★★  
**AMERICA SPENT  
\$16 BILLION ON  
ECONOMIC AND  
MILITARY AID  
IN FISCAL 1991,  
A LITTLE MORE THAN  
1% OF ALL  
FEDERAL SPENDING.**

# The American isolationist mirage

Look for isolationism in American history and you find a mirage: Pat Buchanan's revival of the 1940s slogan "America First" is, like isolationist slogans of the past, more a cry of despair than a counsel of practical policy. From the beginning, for all our continental isolation, we have always acted as if we were part of a larger world.

When 22-year-old George Washington marched through the woods to Fort Necessity, in what is now Pennsylvania, he saw the opening skirmishes of a world war between England and France whose decisive turns came on the Plains of Abraham outside the walls of Quebec, in a monsoon-pelted mango grove in India's Ganges delta and at the deathbed of Czarina Elizabeth in the

Winter Palace in St. Petersburg. The

American colonists won their independence in alliance with Britain's old enemy, France; the

new nation nearly came apart when Alexander Hamilton's Federalists took one side and Thomas Jefferson's Republicans the other in the worldwide struggle between Revolutionary and Napoleonic France and maritime and monarchical Britain. It was to avoid taking sides that Washington urged his countrymen not to "entangle our peace and prosperity in the coils of European ambition." But even this was not a permanent admonition. Washington counseled neutrality only for the 20 years he thought it would take the new nation to grow big enough to defend itself.

In practice, as historian Marcus Cunliffe wrote, America "has never found neutrality easy to maintain; in fact, it has proved almost impossible in the case of major European conflicts." It was Waterloo and the ensuing peace on the Continent—not isolationist views—that enabled Americans to avoid foreign wars. And Americans were ambivalent enough about foreign involvement in the hemisphere throughout the rest of the 19th century that they vigorously embraced the Monroe Doctrine that insisted Europeans not intervene in the hemisphere while still relying on foreign trade and investment to fuel the nation's economic growth.

**Outward expansion.** For most of the 19th century, America was a small country trying to use its geographic isolation to protect its republican idea at home. For the first 40 years of the 20th century, as citizens of a large nation in a world where democracy was on the march—sometimes forward and sometimes back—Americans debated whether they should intervene to extend the democratic idea abroad. That was the stated purpose of American entry into World War I, opposed mainly by Midwestern progressives like

William Jennings Bryan and Robert La Follette, both of whom had big German-American constituencies. The fight over Woodrow Wilson's Versailles Treaty was between those who, with Wilson, would bind America to enforce League of Nations decisions and those like Henry Cabot Lodge who wanted to maintain a free hand to intervene. "[To] isolate the United States or make it a hermit nation," said the supposedly isolationist Lodge, "is sheer absurdity."

Isolationism only slowly became a political force, with the nativist immigration laws of 1921 and 1924, the protectionist Smoot-Hawley Tariff of 1930 and, stimulated by depression at home and the march of dictators abroad, the Neutrality Act of 1935. By 1940, the major issue in

American politics was the struggle between interventionists like Franklin Roosevelt, who wanted to aid Britain against Hitler's Germany, and isolationists like Charles Lindbergh, Joseph Kennedy and Robert Taft who wanted America to stand aside and live with whoever won.

The interventionists prevailed: When Taft, who opposed NATO in 1949, lost to Dwight Eisenhower in 1952, his isolationism vanished. A dozen years later, the pendulum swung back, as many liberals enraged by Democrat Lyndon Johnson's Vietnam

War began a two-decade crusade against U.S. military intervention almost everywhere. Unlike earlier isolationists who opposed intervention because they feared an evil world would corrupt a virtuous America, many "no more Vietnams" isolationists did so because they feared an evil America would corrupt a virtuous world. But they had only limited influence on Jimmy Carter and they failed to stop Ronald Reagan's Roosevelt-like defense buildup and inspirational rhetoric that led to victory in the cold war.

Pat Buchanan, with his strains of nativism and protectionism, is very much out of the earlier isolationist mold, eerily echoing Taft's arguments after their 40-year dormancy, though Buchanan has a far smaller chance of ever becoming president. Isolationists have prevailed from time to time—preventing U.S. support of Spanish democrats in the 1930s and Nicaraguan democrats in the 1980s. But for the last century, isolationism has been more of a political rallying cry than a policy anyone could put into place. Americans have realized they are inevitably affected by what happens in the world, and they are willing to pay great prices—400,000 deaths in the 1940s, \$1.6 trillion in budget deficits in the 1980s—to intervene. However loud the noises this year from what Dan Quayle calls the McGovern-Buchanan axis, isolationism will continue to be a mirage, a source of fascination visible only in the distance. ■



Familiar refrain. Isolationists march in 1941 in New York.

# MEGAMARKET

**The North American Free Trade Agreement: a \$6 trillion market gamble for 363 million consumers**




By BARBARA RUDOLPH

**S**UPPORTERS SEE IT AS THE BEST hope for escape from economic stagnation, a boost for trade and investment, a boon for employment, a lift for standards of living. Critics counter that it will strike a mortal blow at entire sectors of U.S., Canadian and Mexican industry, idling tens of thousands of workers whose jobs will move elsewhere, never to return. Europeans and Asians fret that it may accelerate a division of the world into giant protectionist trading blocs lurking behind new walls of tariffs and bureaucratic restrictions.

The subject of these conflicting visions is an edifice of daring scope and complexity, the North American Free Trade Agreement. Negotiators for the U.S., Canada and Mexico, at work virtually nonstop for the past 14 months, are in the final stages of preparing several hundred pages of regulation upon regulation, written in droning legalese. Yet once approved by the three governments, the trade pact will mark a dramatic turn in the history of the continent: at a stroke it will formalize a grand economic alliance, cement Mexico into a unity it has always occupied geographically, if not psychologically and culturally, and reshape the way North American business is done.

The agreement will bind together three major economies—two mature and wealthy, the third relatively poor but in the throes of rapid and profound modernization. Building upon a similar agreement between the U.S. and Canada that took effect in 1989, the expanded pact will create a \$6.4 trillion megamarket of 363 million consumers. But it will also challenge the three governments with the prospect of far-reaching social dislocations. What worries politicians in all three nations is, Will the trade-off be worth it?

At its most basic level, the treaty will roll back as many as 20,000 separate tariffs over the next 10 to 15 years. Currently those barriers average nearly 11% in Mexico, around 5% in Canada and less

UNEQUAL PARTNERS			
			
	U.S.	Canada	Mexico
GDP in billions of dollars (1991)	\$5,673	\$501	\$283
Population in millions (1991)	253	27	83
Per capita income (1991)	\$22,400	\$21,980	\$3,400
Hourly compensation in manufacturing	\$14.77	\$16.02	\$1.80
Literacy rate	99%	99%	87%
Median age	33	33.5	19
Infant mortality per 1,000	10	7	29

Source: Data Resources; U.S. Bureau of Census; U.S. and Colombia, CIA

than 4% in the U.S. (though duties on products like cocoa, for example, go as high as 20% in Mexico; in Canada tequila is slapped with a 183% duty). More important will be the steps that NAFTA takes to diminish nontariff barriers, such as dairy and cotton quotas in the U.S. and Canada, and various import licenses in Mexico. By rapidly widening the consumer market, the pact aims to spur capital investment across all three jurisdictions. This would be a striking change for Mexico, which has long banned outside ownership of strategic sectors like farm and border lands and oil.

While sweeping, the treaty will not cover everything: Mexico, in line with its constitution, has flatly ruled out foreign ownership in its energy industry, while Canada seeks to extend the blanket protection it won in its earlier agreement with the U.S. for "cultural industries" such as television and publishing. But in a major concession, Mexico has agreed to allow American companies to establish stakes in its banks and, under NAFTA, will include insurance and securities firms, institutions previously barred to foreign ownership.

Behind the numbing technicalities that define any trade agreement, the bottom line of NAFTA concerns growth and jobs. Proponents argue that the agreement

will create both. Washington's conservative Heritage Foundation estimates that Mexico's growth rate, 3.6% last year, could rise to between 6% and 9% if the treaty is ratified.

The U.S. economy will not get anywhere near as big a jolt—it is eight times as large as the other two combined—but should enjoy an explosion in exports to Mexico. According to trade experts, those could increase substantially from a projected \$40 billion this year, ultimately creating more and bigger American paychecks. Says U.S. Trade Representative Carla Hills: "For every billion dollars worth of exports, we gain 20,000 jobs." More important, she told a press conference last week, jobs in export industries pay on average 17% more than employment in the rest of the economy.

Labor leaders fear pain rather than gain. They contend that tens of thousands of workers will be laid off as U.S. companies shift production south to take advantage of industrial wages in Mexico that are roughly one-sixth of those in the U.S. and Canada. The U.S. auto industry alone could lose thousands of positions. Mexican workers earning less than \$20 a day are already building hundreds of thousands of Ford Mercury Tracers and Buick Centuries in Hermosillo and Ramos Arizpe and shipping them north. Under the pact, the

Big Three's presence south of the border will surely grow in the next few years.

Yet many of those lost jobs would probably vanish anyway, either going under to foreign competition or moving to Asia. And there is an advantage to keeping even lost employment closer to home: manufacturers who move to Mexico are more likely to retain their proximate U.S. suppliers than are those who move to Asia. In fact, the trade pact may persuade many U.S. and other companies to shift production from low-cost Asian plants to low-cost Mexican plants, which could generate additional business for U.S. suppliers.

Zenith Electronics, for example, the leading U.S. producer of television sets, has already moved many of its operations from Taiwan to Mexico, and two months ago closed its Asian assembly plant altogether. Without a Mexican base, Zenith guesses, it would have lost about 4,000 U.S. jobs from its Chicago circuit-board plant and its Missouri molding and assembly factory. Another 2,000 to 5,000 supplier jobs would have vanished as well.

Despite the stakes, NAFTA has not made much of a splash in the U.S. presidential campaign... so far. The main reason is that Bill Clinton generally supports the

idea of a free-trade treaty and believes it is in the best interest of American labor, at least over the long term. But he has criticized Bush Administration negotiators for not doing enough to protect American workers. "The President made clear representations on labor standards," Clinton said, "and there appears to be very little of that in the agreement."

What will be the pact's effect on the global economy? Most economists believe that the world is drifting toward three major regional trading blocs: North America, Europe and, more slowly, Asia. The question, says Michael Aho, a fellow at the Council on Foreign Relations in New York City, is whether these connections will turn out to be "benign or belligerent."

Some opponents of NAFTA argue that regional trade arrangements are inevitably destructive. "The NAFTA pact is managed trade," says economist and Nobel laureate Milton Friedman. "Worldwide reduction of tariff barriers is much to be preferred to regional trade agreements." That may be so, but the so-called Uruguay Round of global tariff reductions under the General Agreement on Tariffs and Trade is stalled. Proponents of the North American pact argue that nothing in the

agreement will contravene the GATT accord, if it is ever reached.

And in any event, with or without NAFTA, the three North American economies are becoming ever more entwined. The U.S.-Canada trade relationship, for years the world's largest (\$176 billion last year), grew at a substantially higher rate after the 1989 deal. Even without NAFTA, U.S.-Mexico trade has exploded to \$43 billion, more than double the total five years ago.

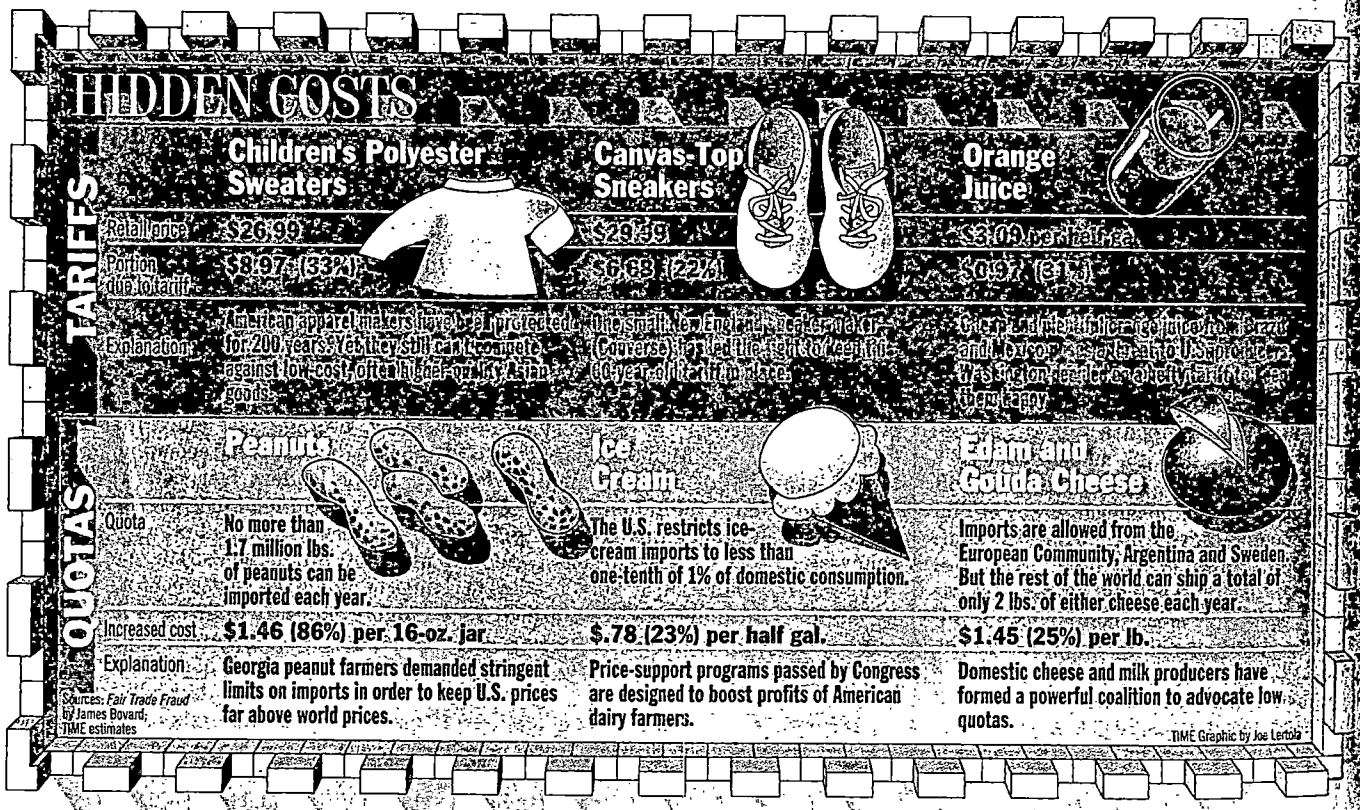
The one certainty is that the trade agreement will not please everyone. Like all political accords, it will be packed with compromises, limitations and second-best solutions. The best basis for assessing the accord is not whether it causes dislocation for any given group of enterprises or people—international competition already does that—but whether it provides a better foundation for the economic security and future prosperity of 363 million people. The benefits derived so far from closer economic relationships between the three countries, and the benefits likely to ensue, make the proposed pact look like a gamble worth taking.

—With reporting by David Altkman, Washington and Laura López/Mexico City, with other bureaus

## How Trade Barriers Hurt U.S. Consumers

America's array of often contradictory trade restrictions are a major obstacle to raising its standard of living and strengthening its competitiveness, according to a study by economist James Bovard for the Dallas-based National Center for Policy Analysis. Tariffs and quotas cost each U.S. family an average of about \$800 a year. Low-income

households suffer more because they spend a greater share of their earnings on food and clothing, two of the most rigidly controlled imports. Despite efforts to eliminate quotas, more than 3,000 of the restrict foreign apparel and textiles, adding \$40 billion to U.S. clothing prices.



(c) 1988 Chicago Tribune, September 2, 1988

## BUTTON UP

Ever since George Bush uttered his contempt for "card-carrying" members of the American Civil Liberties Union, Chicago's ACLU chapter has been inundated with inquiries. Some of the callers are phoning to ask just what the heck George meant, but others-die-hard ACLU fans-were looking for a way to stick it back to George. And that's why lapel buttons are popping up around town, identifying folks as "card-carrying" ACLU members. Beware the dreaded defenders of civil rights.

## QUAYLE FLIGHT

After Republican veep candidate Dan Quayle makes his stop in Chicago next Thursday, he'll jet down to Springfield. He missed an appearance there at the Illinois State Fair with George Bush after the GOPers national convention when he was whisked off to Washington for candidates' training school.

## NO BIZ LIKE SHOW BIZ

LEVEL 1 - 13 OF 44 STORIES

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Chicago Tribune

August 23, 1988, Tuesday, SPORTS FINAL EDITION

SECTION: EDITORIAL; Pg. 18; ZONE: C  
THE GUT ISSUES OF THIS CAMPAIGN

LENGTH: 206 words

## BODY:

On his first day of campaigning in Illinois as the official Republican presidential nominee, George Bush went to the state fair in Springfield and ate Greek souvlaki, Mexican nachos, Japanese tempura, Polish sausage, a Filipino banana dish, Turkish burgers, Indian curry and a dill pickle.

He did it all in front of cameras and the anxious eyes of cooks and other partisans from each of those ethnic groups.

Then he went to Oak Brook and ate shrimp, chicken and salads with a group of wealthy admirers and potential fundraisers.

(c) 1988 Chicago Tribune, August 23, 1988

Early the next morning, as promised by his press office, George Bush and his several thousand new calories had to jog around Grant Park, again in front of cameras and the curious.

Maybe the flaps over how he got into the National Guard and law school are not the only reasons Dan Quayle waited until Monday evening to visit Chicago. Training yourself to be convincing, controlled and just the right degree of cute in response to constantly repeated questions intended to be embarrassing is not easy, but the new Republican vice presidential nominee looks as if can master that pretty quickly.

It takes a seasoned pro, though, to swallow what George Bush did here and come up smiling.

TERMS: CAMPAIGN; CANDIDATE; IMAGE

The Associated Press, August 22, 1988

Democrats claimed it all showed their ticket has more stature.

Bush told a pool of reporters as he flew to Chicago on Air Force Two that Quayle has "been thrown into a hornet's nest, but, you know, I've been there. I've got to take the heat. I made the decision. The buck stops right here."

The vice president said he had "no hesitancy" about keeping Quayle on the ticket despite the controversy over the Indiana senator using his wealthy family's influence to join the National Guard during the Vietnam War.

After arriving at the Springfield, Ill. airport Sunday afternoon Bush hopped out of his limousine and greeted men and women members of an Air National Guard unit.

He said theirs was "a very honorable service" and that others "ought not try to be making something wrong out of serving in that way."

A little later, Bush leaped off a tram on the grounds of the Illinois State Fair and walked over to an Air National Guard exhibit, peering down the barrel of an unloaded antitank missile launcher before playfully turning the weapon on reporters.

The Associated Press, August 22, 1988

Craig Fuller, Bush's chief of staff, said he and other campaign officials are "convinced that Dan Quayle did absolutely nothing improper" by seeking membership in the National Guard during the Vietnam War.

A day earlier, Bush himself had called the issue a "tempest in a teapot."

Fuller, appearing on the CBS television show "Face The Nation," said a review of Quayle's background after questions were raised disclosed nothing new.

He said taking Quayle off the ticket "was never considered."

Bush and Quayle appeared together in Ohio early Sunday before the vice president went off to the Illinois State Fair and Quayle returned to Washington for a couple of days of private time to chart the course of a campaign born less than a week ago at the Republican National Convention in New Orleans.

Democratic presidential nominee Michael Dukakis taking Sunday off at home in Boston and his running mate, Sen. Lloyd Bentsen of Texas was relaxing at his Virginia farm.

(c) 1988 Chicago Tribune, August 22, 1988

The vice president, on a tour of the Illinois State Fair, made light of stories that Quayle had "talked his way" into law school and used family clout to get a job in the Indiana attorney general's office.

While Quayle left the campaign Sunday to return to Washington, Bush seemed determined to laugh off news articles describing Quayle's lackluster academic and early work experience.

When asked if Quayle, who has acknowledged his poor college grades, was smart enough to be president, Bush, who had been eating at a picnic table, responded with a thumbs-up sign and said, "Like me."

Asked if he was a mediocre student, he said: "Yeah, in high school, then I got to be brilliant in college.

"Phi Beta Kappa," said Bush, referring to the national honor society. He then held both thumbs up and said, "Be sure to get that second part."

That remark came just before another exhibition of political theater, when Bush visited the Illinois Air National Guard exhibit at the fairgrounds.

(c) 1988 Chicago Tribune, August 22, 1988

Prompted by photographers, Bush gleefully pointed a TOW missile launcher at the bank of reporters and camera crew.

The crowd cheered the vice president, despite the irony that the sale of TOW missiles to Iran in a failed plan to swap arms for American hostages is one of the issues Democrats are using against the Reagan-Bush administration.

Taking aim at the press was also a benign illustration of the frustration that many Bush supporters and staff members feel about the intense examination Quayle is receiving and how that has distracted from Bush's eagerness to bask in post-convention enthusiasm as he visited the largest Midwestern state.

Bush has been trying to make his case before large rallies and in private fundraisers, such as the one he attended Sunday night at the Oak Brook home of lawyer Thomas Fawell.

But since Bush selected Quayle last Tuesday, the senator's ability to enlist in the Indiana National Guard in 1969 during the Vietnam War has prompted repeated questions about the caliber of the Republican vice presidential nominee and the judgment of the presidential nominee.

(c) 1988 Chicago Tribune, August 22, 1988

Bush, who shed his coat and tie to walk and ride on a tractor-pulled tram, seemed to delight in the downhome kitsch of the state fair, where he sat at a picnic table and nibbled from plates of ethnic food.

Apparently unwilling to offend any nationality in his run for the presidency, Bush ate Greek souvlaki, Mexican nachos, Japanese tempura, Polish sausage and dill pickle, a Filipino banana dish, Turkish burgers and Indian curry.

His wife, Barbara, took only delicate bites.

As he campaigned in Cleveland earlier in the day, Bush dismissed suggestions that Quayle had left a day earlier than expected in order to lower his profile.

"He's got to get his act together, get the schedule going," Bush said at the Cleveland Airport. "This (nomination) hit him out of the clear blue sky and he and (campaign chairman) Jim Baker and a lot of our people are out there planning the campaign."

Bush, who has been lauded and scolded for his loyalty to President Reagan over the last eight years, also showed loyalty to his running mate of the last five days. "He's going to campaign, and he'll do very, very well," said the

(c) 1988 Chicago Tribune, August 22, 1988

vice president.

Commenting on Quayle's record, Bush said, "Let everybody in that generation turn and cast the first stone, and see where they were at then. . . . The National Guard is honorable service. Some went to Canada. . . . Do we condemn an entire generation? I don't think so."

A test of how Bush's generation will judge that may come as early as Monday morning, when Bush is scheduled to speak to the convention of the American Veterans of Foreign Wars and afterwards visit a veterans hospital.

Quayle is not expected to resume his own campaigning until Wednesday.

In his speech to a Republican campaign picnic at the fairgrounds, Bush declared: "The last few days for me and for Dan Quayle have been tremendously rewarding. The crowds have been big, and even these polls that had me kicked and kicked hard seem to be going in the right direction."

After the speech, Gov. James Thompson was also a booster, claiming, "This is the first campaign event in 13 years on the trail that I've ever seen not a single negative comment, not a single boo."

(c) 1988 Los Angeles Times, August 22, 1988

The day originally was meant to showcase the Bush and Quayle families at the Illinois State Fair's "Family Day." But Quayle's appearance was abruptly canceled and he flew back to Washington with Bush campaign officials, leaving the vice president to explain his departure and respond to new questions raised about his academic background.

Bush, speaking to reporters at the airport here Sunday afternoon, said Quayle left for Washington to get a jump on campaign preparations and to make personal arrangements necessitated by his surprise selection as Bush's running mate.

"He's got to get his act together and get the schedule going," said Bush. "This hit him out of the clear blue sky."

Later, aboard Air Force Two en route to Chicago, Bush contrasted Quayle's actions with those who fled to Canada rather than risk going to war.

"Let everybody in that generation turn and cast the first stone and see where they were . . . then," he said. "The National Guard is honorable service. Some went to Canada. . . . Do we condemn an entire generation? I don't think so."

Campaign chairman James A. Baker III, California-based political consultant Stuart K. Spencer -- who will organize the Quayle campaign -- and other Bush



→ Every year at the fair, a woman comes in and sculpts a cow out of butter sits in an air conditioned room

→ A dog show

→ different classes of cattle

→ Hogs, sheep, goats

→ rabbits (Nash jokes)

→ Chickens

(A Fujis pen)

→ Sale of champions

Grand champion Steer (male cow)

" " Barrow ("hog")

" " w/ ~~the~~ (sheep)

→ That's what he'll get

750007

POTUS present the <sup>kids</sup> presidential Excellence award

- McDonald's Corp is based out of one of the suburbs of Chicago



- DeCaton III. → Arthur Daniels  
Midland

→ if you put III on the East coast,  

---

It would cover 14 states

“ From Galena <sup>(NW)</sup> to Golconda <sup>(SE)</sup> ”

“ From Chicago to Cairo <sup>(KAY row)</sup> ”

(that makes the X across Chicago)

→ little town ← “ Home of the Mother of Sang  
Goldwater ”

→ Danziger ← worked for Chicago Tribune

THE WHITE HOUSE

WASHINGTON

⇒ Bonnie Blair - olympic <sup>speedskater</sup> 3 gold medals  
→ Champagne in Albertville  
→ St. Kevin Parade  
→ Grand Marshall last night  
→ cut ribbon w/

⇒ Betty Okino - gymnast from  
Stamford Ill. won  
a bronze in one  
of the gymnastic events

⇒ Kevin Gamble plays for the Boston  
Celtics, for Springfield

Springfield is the original town of  
the horseshoe sandwich (or a horshee)

- 2 pieces of toast
- french fries
- melted cheese on top

stop play w/ you  
food

⇒ sto

→ CORN DOGS ←

~~Stand~~ Stand -- open all year round

At the fair

→ you can get anything on a stick

- ice cream
  - Pizelle
  - cheese
  - shrimp on a stick
  - ~~Banana~~ pink
  - Melon on a stick
- " what's going on so new on a stick "

The deal of

Ellis Bridgeworks

- out of Jacksonville
- they make the old fairs wheels
- 30 mi W of Springfield
- there'll be two out two  
again

- You Edgar appointed the 1st ever  
woman as head of agrib.

Sangamon County

Sp. is part of it

" not a name of  
" Land of Plenty to East "

THE WHITE HOUSE

WASHINGTON

August 13, 1992

ILLINOIS STATE FAIR

DATE: Sunday, August 23, 1992  
LOCATION: Illinois State Fairgrounds  
Springfield, Illinois  
TIME: 12:30 p.m.  
FROM: RONALD C. KAUFMAN

I. PURPOSE

To address the citizens of Illinois in attendance at the Illinois State Fair.

II. BACKGROUND

The President attended this same State Fair during the 1988 presidential campaign.

The Illinois State Fair, which runs from August 14-23, is one of the largest State Fairs in the nation with more than one million people visiting annually. In attendance at this Fair will be farmers, livestock breeders, grain dealers and average citizens from across the state.

In addition, there will be several award winning livestock displays along with conservation demonstrations conducted by local state agencies.

More than 15,000 people are expected to be in attendance during the President's visit to the Fairgrounds.

Bill Clinton and Al Gore will have visited the Fair on Thursday, August 20 whereupon they visited to "Ethnic Village." This is a particular portion of the Fair the President toured in 1988.

III. PARTICIPANTS

The President  
Governor Edgar

IV. SEQUENCE OF EVENTS

See Advance Office for details.

PAGE TWO

V. PRESS PLAN

Open.

VI. REMARKS

Remarks provided by the Office of Speechwriting.

August 10, 1992

GROSSMAN

Memorandum to: Gary Foster  
From: Pat Mizell  
Re: President's Visit to Springfield, Illinois, August 23, 1992

The President would travel to Springfield, Illinois on August 23, 1992, to attend the Illinois State Fair.

**PROPOSED EVENT SCENARIO:**

The President would arrive at the Springfield, Illinois airport and travel to the Illinois State Fairgrounds via motorcade. The President would proceed via motorcade directly to the Illinois Farm Exposition on the fairgrounds.

The Illinois Farm Exposition is a display on a parking lot next to the race track. On the parking lot, farm implements are displayed. On August 23, 1992, the farm exposition will be the major event scheduled for that day, and will have the most people present.

I propose that upon arrival at the Illinois Farm Exposition the President view the grand champion animals with the children who raised them. The animals will have already been awarded their blue ribbons earlier in the week, but many of the children would be happy to return with their animals to show the President. The animals could be lined in a semicircle on the parking lot. The Illinois Director of Agriculture is Becky Doyle, and could serve as a guide for the President at the Illinois Farm Expo.

After viewing the animals, the President could walk to another area of the Illinois Farm Expo and participate in some form of informal question and answer with Illinois farmers or Illinois farming families. The first scenario would be for the President to walk over to a designated area where ten to twenty farmers would be informally gathered around a farm implement or machinery, and the President could engage in a very informal chat with the small groups. Another scenario would entail having the President walk over to a larger group of fifty to sixty farmers and their families in a seated and standing informal environment on the parking lot, and engage in a mini "ask George Bush." Another scenario would be for the President to walk over and participate in a full blown "ask George Bush" with two to three hundred farmers and their families seated in the parking lot. I recommend the first setting with the small group of farmers. The first

# Withdrawal/Redaction Sheet

## (George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
02. Memo	Re: POTUS trip to Illinois State Fair; personal information redacted. (1 pp.)	08/10/92	P-6, (b)(6)	

**Collection:**

**Record Group:** Bush Presidential Records  
**Office:** Speechwriting, White House Office of  
**Series:** Speech File, Backup  
**Subseries:**  
**WHORM Cat.:**  
**File Location:** Illinois State Fair 8/23/92

<p><b>Date Closed:</b> 12/3/2004  <b>FOIA/SYS Case #:</b>  <b>Re-review Case #:</b> 2004-2265-S  <b>P-2/P-5 Review Case #:</b></p>	<p><b>OA/ID Number:</b> 07578</p>
<p><b>MR Case #:</b>  <b>MR Disposition:</b>  <b>Disposition Date:</b></p>	<p><b>Appeal Case #:</b>  <b>Appeal Disposition:</b>  <b>Disposition Date:</b></p>

### RESTRICTION CODES

**Presidential Records Act - [44 U.S.C. 2204(a)]**

- P-1 National Security Classified Information [(a)(1) of the PRA]
- P-2 Relating to the appointment to Federal office [(a)(2) of the PRA]
- P-3 Release would violate a Federal statute [(a)(3) of the PRA]
- P-4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
- P-5 Release would disclose confidential advise between the President and his advisors, or between such advisors [(a)(5) of the PRA]
- P-6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

**Freedom of Information Act - [5 U.S.C. 552(b)]**

- (b)(1) National security classified information [(b)(1) of the FOIA]
- (b)(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
- (b)(3) Release would violate a Federal statute [(b)(3) of the FOIA]
- (b)(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
- (b)(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
- (b)(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
- (b)(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
- (b)(9) Release would disclose geological or geophysical information

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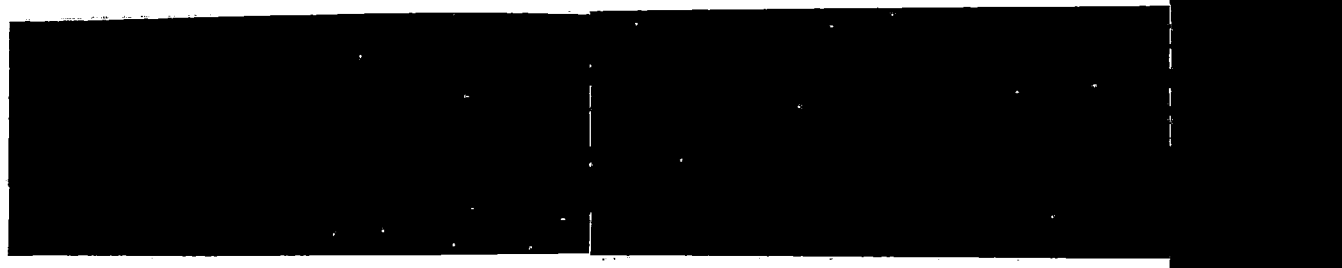
scenario would provide the best setting for a very informal one-on-one interaction with average farmers, and would show the President's concern for the farmers and their industry.

After participating in the farm exposition, the President would proceed by motorcade to the coliseum on the Illinois State Fairgrounds. The coliseum seats approximately 3,000 people in the seats, and another 1,000 people could be standing or seated on the floor of the coliseum. The President would be introduced on stage and make remarks. Following a presentation, the President would depart the dias and proceed to the motorcade.

The motorcade would then proceed to the Department of Agriculture Building, where the President would participate in a campaign photo event. If the President were inclined to participate in an impromptu event, the most convenient time would be between the rally and the campaign event.

An alternative site for the viewing of the animals and the meeting with the farmers would be the Junior Livestock Building, which would provide an indoor setting in case of rain. The farm exposition is a better site because there is more going on; most of the animals that would have been present in the Junior Livestock Building will have been moved out of the building at the time of this event.

**BACKGROUND:**



Other proposed event sites include an Ethanol Exhibit, where various cars and boats are displayed which run on ethanol. The locals are really pushing this as a proposed event. At the very least, Andy Foster requested that something regarding ethanol be mentioned in the President's remark during the coliseum period.

If the President should desire to eat lunch at the state fair, there is an Ethnic Center where various ethnic foods are served, and the President could go to the food hall and eat. The President did this in 1988.

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headquarters 527 1992

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