211 N. COLUMBUS STREET
ALEXANDRIA, VIRGINIA 22314

6 November 1992

The Honorable James A. Baker III
Chief of Staff
The White House
Washington, D.C. 20500

Dear Secretary Baker,

You fought the good fight against tough odds. I want to say it was an honor to have served with you at the Treasury. I wish you luck in future endeavors and hope you remain in the public sphere.

Best regards.

Yours sincerely,

Charles H. Powers

UNDER SECRETARY OF STATE
FOR ECONOMIC AFFAIRS
WASHINGTON

NOV 20 1992

Dear Mr. Secretary,

After eight years of working for you at Treasury and State you will always be "Mr. Secretary" in my mind no matter what your current job title suggests! I wanted to thank you for the opportunity to work for you over these past eight exciting years. It has been a truly unique experience for me and I sincerely appreciate the chance to have been involved in difficult, challenging, exciting, historic and yes fun projects for you.

When I briefed you at your first OECD Ministerial meeting in the spring of 1985 I had no idea that I would annoy you so much that you would send me to Alma Ata, Bishkek, and Ulaanbaator, in the middle of winter. Boy do you get even! Seriously, the assignments you have passed my way from APEC to Mongolia to SII have challenged me and provided new ways to involve our country in economic issues that can really make a difference. Your personal leadership and engagement in key problems has pushed them to resolution and has placed your special imprimatur on global, regional and bilateral affairs.

I hope that in the future I have the opportunity to work for you again in some capacity. In the meantime if I can be of any assistance, please don't hesitate to call me at work or at home (301) 598-8065.

Thanks again for the unique opportunities that came from working for you.

Sincerely,

Bob

Robert C. Fauver, Acting

The Honorable
James A. Baker, III,
Chief of Staff,
The White House.

Combined Federal Campaign of the National Capital Area

NOV 19 1992

The Honorable James A. Baker, III
Chief of Staff
The White House
Washington, DC 20500

Dear Jim:

Across the government, Federal employees have had a busy and productive week as they reach for their Combined Federal Campaign goals. More than $4,222,944 was added to our total this week bringing us to $23,343,836 or 61% of our $38 million goal.

Four more organizations have become million-dollar campaigns: Justice, Transportation, Health and Human Services, and the Postal Service. Congratulations!

The Winners Circle welcomes two more campaigns in the "Top 50": the Defense Logistics Agency and the Federal Deposit Insurance Corporation. Government-wide, there are 17 campaigns with outstanding achievements of more than a 10% increase over their total raised in last fall's record-breaking campaign. Their hard work deserves our special commendation.

Our results to date indicate that individual giving is strong. We need to focus on making sure that every employee is given an opportunity to give. Believe it or not, there are still thousands of people who haven't been asked.

As winter sets in and we approach Thanksgiving, we are again reminded of the needs of so many in our community and around the world. The CFC is a way for all of us to share what we have with those who have so little.

Thanks again for your leadership and support.

Sincerely,

Pat

Patricia Saiki
Administrator
U.S. Small Business Administration

Lamar

Lamar Alexander
Secretary of Education

Enclosure

1992 COMBINED FEDERAL CAMPAIGN
"TOP 50 ACCOUNTS"

18-Nov-92

Organization	Current Number of Employees	$ Raised 91 CFC	Goal 92 CFC	No. of Gifts 92 CFC	$ Raised 92 CFC	% of Partici-pation	Per Emp Level of Giving	Average Gift	% of 92 Goal Reached	% of 91 CFC Reached	$ 91 vs 92
Navy/USMC	42,795	$3,204,328	$3,205,111	19,833	2,385,612	46.3%	55.75	$120.28	74.4%	74.4%	(818,716)
U.S. Postal Service	22,277	2,546,887	2,544,736	5,956	1,041,501	26.7%	46.75	174.87	40.9%	40.9%	(1,505,386)
Army	37,693	2,506,987	2,540,000	18,875	1,893,958	50.1%	50.25	100.34	74.6%	75.5%	(613,029)
Health & Human Svc's	24,328	2,196,603	2,350,000	7,061	1,089,978	29.0%	44.80	154.37	46.4%	49.6%	(1,106,625)
Treasury	21,320	2,058,420	2,223,000	7,256	1,298,174	34.0%	60.89	178.91	58.4%	63.1%	(760,246)
Commerce	17,817	1,846,903	2,000,000	2,968	594,166	16.7%	33.35	200.19	29.7%	32.2%	(1,252,737)
Justice	19,941	1,512,374	1,600,000	9,057	1,167,142	45.4%	58.53	128.87	72.9%	77.2%	(345,232)
Agriculture	11,920	1,372,397	1,400,000	8,600	1,402,970	72.1%	117.70	163.14	100.2%	102.2%	30,573
Air Force	13,457	1,256,970	1,260,000	9,716	1,147,036	72.2%	85.24	118.06	91.0%	91.3%	(109,934)
Transportation	8,968	1,206,269	1,090,000	7,069	1,156,928	78.8%	129.01	163.66	106.1%	95.9%	(49,341)
State	12,958	1,140,031	1,200,000	1,981	436,293	15.3%	33.67	220.24	36.4%	38.3%	(703,738)
C.I.A.		783,798	800,000	3,722	503,559	ERR	ERR	135.29	62.9%	64.2%	(280,239)
Energy	5,971	702,446	725,000	3,163	617,523	53.0%	103.42	195.23	85.2%	87.9%	(84,923)
Labor	5,991	622,327	625,000	2,956	528,673	49.3%	88.24	178.85	84.6%	85.0%	(93,654)
Interior	8,615	589,239	620,000	2,266	382,983	26.3%	44.46	169.01	61.8%	65.0%	(206,256)
E.P.A.	5,200	580,570	586,000	354	87,437	6.8%	16.81	247.00	14.9%	15.1%	(493,133)
V.A.	5,932	538,576	538,600	1,452	252,723	24.5%	42.60	174.05	46.9%	46.9%	(285,853)
G.A.O.	3,332	530,174	506,000	2,522	538,204	75.7%	161.53	213.40	106.4%	101.5%	8,030
G.S.A.	6,630	500,422	410,000	4,538	505,143	68.4%	76.19	111.31	123.2%	100.9%	4,721

"TOP 50 ACCOUNTS"

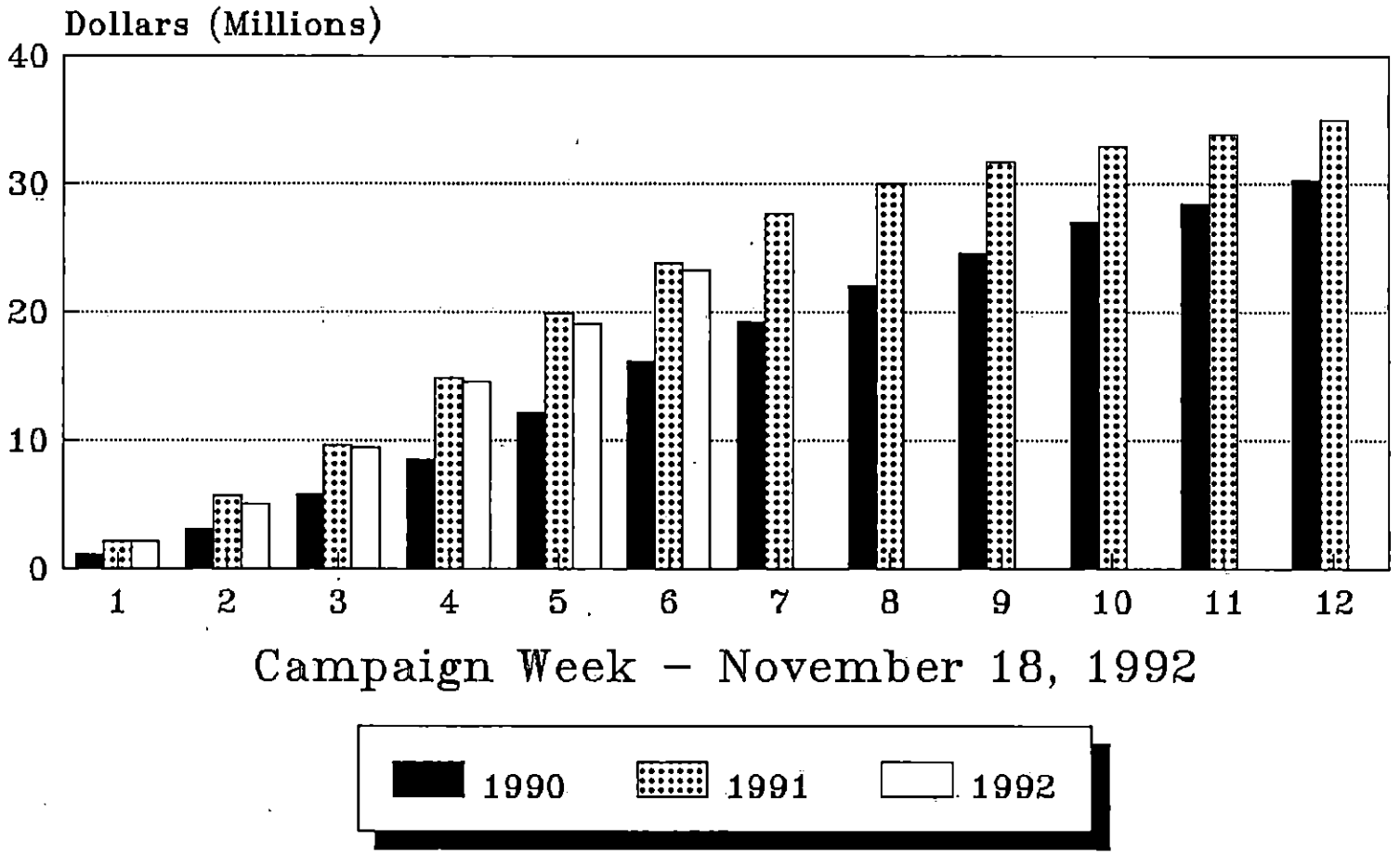
Organization	Current Number of Employees	$ Raised 91 CFC	Goal 92 CFC	No. of Gifts 92 CFC	$ Raised 92 CFC	% of Partici-pation	Per Emp Level of Giving	Average Gift	% of 92 Goal Reached	% of 91 CFC Reached	$ 91 vs 92
Int Dev Coop Ag/AID	2,926	452,615	435,000	335	68,690	11.4%	23.48	205.04	15.8%	15.2%	(383,925)
Ofc Sec of Defense	4,125	416,486	445,000	2,370	379,569	57.5%	92.02	160.16	85.3%	91.1%	(36,917)
Def Intell Agency		392,505	400,104	2,116	320,324	ERR	ERR	151.38	80.1%	81.6%	(72,181)
Goddard	3,710	367,868	351,000	1,926	347,292	51.9%	93.61	180.32	98.9%	94.4%	(20,576)
Housing & Urban Dev	3,447	356,560	356,560	1,272	223,795	36.9%	64.92	175.94	62.8%	62.8%	(132,765)
U.S.I.A.	5,028	350,427	385,500	405	86,159	8.1%	17.14	212.74	22.3%	24.6%	(264,268)
Library of Congress	4,115	346,286	381,000	207	47,826	5.0%	11.62	231.04	12.6%	13.8%	(298,460)
Def Mapping Agency	4,074	329,902	340,000	2,363	351,995	58.0%	86.40	148.96	103.5%	106.7%	22,093
Education	3,111	313,130	336,000	832	149,288	26.7%	47.99	179.43	44.4%	47.7%	(163,842)
N.A.S.A.	1,886	298,789	321,000	760	181,606	40.3%	96.29	238.96	56.6%	60.8%	(117,183)
Nuclear Reg Comm	2,216	298,299	235,000	725	147,023	32.7%	66.35	202.79	62.6%	49.3%	(151,276)
Def Info Systems Agy	3,726	273,141	333,619	1,907	256,720	51.2%	68.90	134.62	77.0%	94.0%	(16,421)
Def Logistics Agy	3,143	258,796	283,568	2,188	286,125	69.6%	91.04	130.77	100.9%	110.6%	27,329
Smithsonian	4,794	258,107	282,000	941	138,246	19.6%	28.84	146.91	49.0%	53.6%	(119,861)
Gov Printing Office	4,381	240,320	200,000	827	91,560	18.9%	20.90	110.71	45.8%	38.1%	(148,760)
Federal Reserve	1,558	240,032	158,200	1,113	256,529	71.4%	164.65	230.48	162.2%	106.9%	16,497
O.P.M.	2,801	227,012	244,265	1,882	229,614	67.2%	81.98	122.01	94.0%	101.1%	2,602
House	8,000	185,015	210,000	212	54,584	2.7%	6.82	257.47	26.0%	29.5%	(130,431)
Senate	7,500	175,660	175,000	197	44,346	2.6%	5.91	225.11	25.3%	25.2%	(131,314)
Fed Energy Reg Comm	1,330	174,708	134,500	659	134,021	49.5%	100.77	203.37	99.6%	76.7%	(40,687)

"TOP 50 ACCOUNTS"

Organization	Current Number of Employees	$ Raised 91 CFC	Goal 92 CFC	No. of Gifts 92 CFC	$ Raised 92 CFC	% of Partici-pation	Per Emp Level of Giving	Average Gift	% of 92 Goal Reached	% of 91 CFC Reached	$ 91 vs 92
The Joint Staff	1,338	164,973	160,000	1,190	163,373	88.9%	122.10	137.29	102.1%	99.0%	(1,600)
F.C.C.	1,220	158,896	125,000	459	97,354	37.6%	79.80	212.10	77.9%	61.3%	(61,542)
S.E.C.	1,541	150,313	155,000	485	78,797	31.5%	51.13	162.47	50.8%	52.4%	(71,516)
F.D.I.C.	2,047	143,202	150,000	850	173,166	41.5%	84.60	203.72	115.4%	120.9%	29,964
E.E.O.C.	689	118,975	120,000	537	111,724	77.9%	162.15	208.05	93.1%	93.9%	(7,251)
Nat Science Found	1,300	117,150	129,000	111	26,340	8.5%	20.26	237.30	20.4%	22.5%	(90,810)
Fed Trade Comm	814	111,114	78,000	349	97,015	42.9%	119.18	277.98	124.4%	87.3%	(14,099)
Fed Emerg Mgt Agy	959	109,107	100,000	460	85,220	48.0%	88.86	185.26	85.2%	78.1%	(23,887)
Resolution Trust Co.	1,350	105,826	112,000	555	110,752	41.1%	82.04	199.55	98.9%	104.7%	4,926
S.B.A.	1,000	103,892	112,000	548	96,228	54.8%	96.23	175.60	85.9%	92.6%	(7,664)
Ofc of the I. G.	1,100	101,436	112,387	742	120,814	67.5%	109.83	162.82	107.5%	119.1%	19,378
TOP 50 TOTALS:	360,374	$33,036,263	$33,584,150	148,868	$21,986,098	41.3%	61.01	147.69	65.5%	66.6%	(11,050,165)

Combined Federal Campaign

Cumulative Contributions



Central Files - NRN

November 16, 1992

Bob Zedeck
c/o James Baker
White House Transition Team
The White House
1600 Pennsylvania Ave.
Washington, D.C. 20010

Mr. Zedeck,

Your name has prominently been mentioned as a "Visionary" in the Bush White House,some months earlier during a broadcast of the MacNeill/Lehrer News Hour . This material I'm sending you was tentatively prepared for H. Ross Perot's economic movement, but you/your people and exspecially the "new Clinton people" may have more use for it.

The required computer models mentioned in the material enclosed are still under developement. Please have anyone interested in this approach to write me at:

EXOSTRUCTURE MODEL
c/o William S. Warren
P.O. Box 155353
Ft. Worth, TX 76155

I will attempt to send you the full 100 plus page version as soon as it's available with cooresponding computer data sets for any modeling techniques which you may have at your disposal. The present system is a coorelated structure using Lotus 3.0,Math-Matica 2.1 and a interactive AI based financial gaming system.

Sincerely,

William S. Warren

W. Warren
Box 155353
Ft. Worth TX 1655

FINANCIAL SECURITY ACT

U.S. GOVERNMENT INVESTMENT AUTHORITY

TECHNOLOGICAL ACHIEVEMENT INITIATIVE

EXTRASOLAR COLONIZATION ACT

~~NEXT WORLDS SECURITY AMENDMENT~~

ABSTRACT

This is a theoretical attempt at U.S. Government Deficit reduction. The means of reduction involves the use of Government/private co-ownership of some speculative financial trusts and other structures related to technology with "extra-planetary" property acquistions. These acquistions and financial instruments are weighted with appropriate growth percentages and directly compete with existing market value for similar sized investments. Provided the proper judgement/investment calls are made (the U.S. Governments agent in this endeavor will have entreprenurial investment authority) certain economic scenarios can be predicted whereby significant inroads toward deficit elimination/surplus acquistion are attained. The author stresses the speculative nature of this type of policy undertaking, but points out these risks are not new and these are merely collections of previously workable ideas.

Introduction

Arthur Carmano in Financial Freedom Report has suggested a means for every American to invest & leverage his/her economic assets by using high-interest bonds and the co-investment activity of the Banking institutions. These ideas could be realistically applied to the Federal level provided such investment vehicles existed. Do they ?

Do they?

Perhaps, but we may have to create them ourselves.

There is no attempt here at overt overspeculation, but merely to manage several data sets as guideposts for future decision-making. Any and all data structures relevant to these discussions and models may be obtained from the individual sources given or deduced from a genaral outline of realistic expectations or purvues.

The first four models discussed are primarily for concept illustration. Subsequent data aside, this entire exercise is but a conceptual illustration. Professionals involved here should make every attempt to generate similar starting points in their respective fields. Validation will be very tricky - the only true validation will be the activities of the U.S. economy from 1992 to 2000.

SCENARIO A

To fully develope and demonstrate the ideas of Mr. Carmano, the accrued value/amortized returns conceptualization is extended into a collective measure. Also the ideas of Dr. Gerard K. O'Neill are incorporated into the latter year numbers. For the first scenario however, let's look at reasonable numbers for a simple linear model.

One could say the following was the initial thrust of these ideas, and for illustrative purposes they are included here as a guide, for the validation of the early model framework. Assessing these numbers of course is a 'excursion into trivialities'. Surely most observant econometricists might laugh at the idea of the Government even envisioning some type of investment program that would net them 33% return every year for 20 years ! Our first model though, as an expert system, would retreat to this scenario even if only in the (see addendum 2) event of a structural model collapse (i.e. computer data base failure) and not on any reasonable econometric scenario.

Initial values are:

(1) Government debt at 4.1 Trillion in 1992.

(2) Government contribution (from entitlement surplus/cuts?) of 25 billion per year every year for 20 years.

(3) Debt is added to every 7 years (100 billion is very optimistic).

(4) Government debt interest rates are fixed at 6% per year.

SCENARIO A - FIXED RISC/LINEAR MODEL - OPTIMAL

	25 billion a year @ 33%	20 years at 6%/100 billion (7 years)
- 1991	-0-	4.1 Trillion Dollars
1992	25 billion	4.446 trillion
1993	58.83 billion	4.7126 trillion
1994	102.776 billion	4.9953 trillion
1995	162.034 billion	5.2950 trillion
1996	241.045 billion	5.6127 trillion
1997	346.393 billion	5.9494 trillion
1998	486.857 billion	6.3063 trillion
- 1999	674.1424 billion	6.7846 trillion
2000	923.8563 billion	7.1916 trillion
2001	1256.806 billion	7.6231 trillion
2002	1.70074 trillion	8.0804 trillion
2003	2.29265 trillion	8.56524 trillion
2004	3.08135 trillion	9.079154 trillion
2005	4.13346 trillion	9.62376 trillion
- 2006	5.53628 trillion	10.30118 trillion
2007	7.4067 trillion	10.91925 trillion
2008	9.9005 trillion	11.574405 trillion
2009	13.225 trillion	12.268869 trillion *

* Breakeven is in 2009-2010. Surplus if continued into 2015 is 56.043 trillion dollars.

SCENARIO B MIXED

Continuing with relavant ideas may seem shortsighted, but the models of failure often are more interesting than the most speculative of the successfull ones.

Here we have trudged through more realistic data sets, action points with decision branching generators for the purpose of econometric enhancement. Some of the decision variable sets could be (and some should be included in any final model - numbers aside) baselined in toto. The addendum 2 model (scenario prime) is predictive once baselines are settled and the raw extrapolation from the earlier working scenarios have been properly weighted. Notice that the TB & B percentage returns are based on intrinsic value, not weighted by government contribution (although the private sector contributions are assumed here as major point movers.)

If later scenarios require more failure analysis, this model should be augmented with present-day (and possibly anomalous) economic data and extended with full scenario prime assumptions on expenditures until 2025.

Initial values are:

(1) Government debt at 4.1 trillion in 1992.
(2) First fifteen years all growth under 25%
(3) TB & B (technical breakthrough/economic breakthrough resp.) limited to 10% growth increase and/or 5 years susstained growth increase.
(4) No contributions by governmental authorities acting as entreprenuerial speculators.
(5) Max government contribution is 1 billion per year.
(6) Debt is contributed to at 9 billion per year.
(7) Debt interest service is less than 10%.

SCENARIO B MIXED NO CONTRIBUTIONS/LIMITED RATES

B-economic breakthrough TB-technological breakthrough

year	1 billion per year savings rate	amount invested		rate	9 billion per year deficit amount of debt
1990	6%	-0-		4%	
1991	6%	-0-		4%	4.1 trillion
1992	6%	-0-		4%	4.262 trillion
1993	6%	1 billion		4%	4.4346 trillion
1994	6%	2.06 billion		4%	4.612 trillion
1995	6%	3.1839 billion		5%	4.8426 trillion
1996	10%	4.5023 billion	TB	5%	5.0847 trillion
1997	10%	5.9525 billion		6%	5.3898 trillion
1998	9%	7.5478 billion		7%	5.7671 trillion
1999	12½%	9.2271 billion	TB	6%	6.1131 trillion
2000	11%	11.38 billion		7%	6.541 trillion
2001	10%	13.518 billion		6%	6.9235 trillion
2002	10%	15.87 billion		5%	7.2802 trillion
2003	25%	18.457 billion	B	5%	7.6442 trillion
2004	20%	24.071 billion		10%	8.4086 trillion
2005	27%	29.885 billion	TB	9%	9.1654 trillion
2006	30%	38.954 billion	TB	10%	10.0083 trillion
2007	25%	51.64 billion		9%	12.007 trillion
2008	20%	65.55 billion		9%	13.088 trillion
2009	45%	96.048 billion	B/TB	10%	14.397 trillion
2010	45%	140.27 billion	BB/TB	9%	15.093 trillion
2011	40%	203.39 billion			
2012	35%	285.75 billion			
2013	30%	386.76 billion	TB		
2014	25%	503.79 billion			
2015	25%	630.74 billion	TB		
2016	20%	789.43 billion			
2017	15%	908.84 billion			
2018	50%	1364.3 billion	MTB		
2019	45%	1.9779 trillion			
2020	40%	2.7701 trillion			
2021	35%	3.879 trillion			
2022	30%	5.0427 trillion			
2023	40%	7.0590 trillion	TB		
2024	35%	9.5307 trillion			
2025	30%	12.39 trillion		**********	

*** even though major breakthroughs were allowed, the debt stress would have ended most of these activities before 2006.

SCENARIO C HIGH ORDER SPECULATION

Here now is the tricky stuff. Second guessing breakthroughs, presupposing government timely entreprenurial action. Valid technological completion data & times. Both this and the D scenario are partially modeled in the scenario prime addendum, with appropriate predictor/corrector formulas for TB, B and other points of action. The more interesting econometric models & sources can be found in Tom Logdon's SPACE INC.(ref. 16) and CITIES IN SPACE (ref. 14).

Robert Allen in (ref 4. Investing I,II, &III) would ask,'are there any deep discounted real estate values on the Moon?' After we have built 6 or 7 colonies up their - the first ones (if paid up already) would probably be cheaper than the raw acreage of a bargain-priced crater.

Initial values are:

(1) 10 billion per government contribution
(2) 100 billion per 7 years debt allocation
(3) entreprenual 'expert' advising government on B and TB oppotunity years
(4) Initial debt rates at 4%, but unrestricted afterward
(5) Rates drop as investment nears 30% of debt
(6) All breakthroughs interrelated & maxed out by 'expert' interaction.

SCENARIO C HIGH ORDER SPECULATION TECHNOLOGY BREAKTHROUGHS
MARS, MOON and OTHER PROPERTY ACQUISTIONS
B- breakthrough TB- technological breakthrough

year	rate	invested amount	rate	debt accumulation
1990		-0-		
1991		-0-		
1992	7%	10 billion	4%	4.1 trillion dollars
1993	7%	20.7 billion (int. dis.)	5%	4.6562 trillion
1994	12%	32.149 billion	5%	4.8891 trillion
1995	20%	46.006 billion	7% *	5.3313 trillion
1996	30%	315.207 b (gov.inv. 250b)	8% b	6.0078 trillion
1997	86%	419.7693 billion B	10%	6.6086 trillion
1998	50%	790.771 billion	10%	7.2694 trillion
1999	45%	1156.617 billion	9%	7.9507 trillion
2000	35%	1455.772 billion	9% *	8.7663 trillion
2001	30%	3402.5 b (gov. inv. 1.5t)	8%	10.9676 trillion
2002	56%	5.3079 trillion B	12%	12.2837 trillion
2003	45%	7.69645 trillion	12%	13.7577 trillion
2004	30%	10.00538 trillion	10%	15.1335 trillion
2005	30%	13.00699 trillion	10%	16.6469 trillion
2006	25%	16.25874 trillion	9%	18.2451 trillion
2007	40%	22.76224 trillion (breakeven)	8%	19.7047 trillion
2008	56%	(35.5 t paid 10.8 trillion)	10%	21.6752 t (-10.8 t)
2009	55%	38.29909 trillion	10%	13.0427 trillion
2010	50%	(57.4 t paid 7.2 t)	10%	14.3470 t (-7.2 t)
2011	70%	(75.37296 paid in full)	8%	8.294781 trillion
2012	86%	119.83925 trillion	8%	--0--

* 100 billion debt added

interest return jump in 2007, 2011 due to accounting/efficiences, consolidations etc.

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is humanity's "manifest destiny" to move beyond the confines of this planet. Many of us also believe that such off-planet expansion, with an accompanying development of non-terrestrial energy and resources, is the only long-term way to ensure economic development without wrecking the Earth's environment. Very few of us want to do it solely for the dubious pleasure of pitting ourselves against a hostile nature, anymore than the pioneers of the American West endured their hardships because they enjoyed them. Like those pioneers, we are willing to face the hardships because of our ultimate goal. But the hardships are not the goal, and those who do not understand this are missing the point. ☆

Moon-Mars? Later May be Too Late!

by Jeffrey G. Liss

When Tom Rogers argues, "Moon-Mars? Not now!," he really is saying, "Moon-Mars? Not ever!"

His argument, that "a Moon-Mars program will not produce any economic return commensurate with its cost as far ahead as can be seen with confidence," would be just as true *whenever* we first go—whether in 2000, 2020, 2050, 3000 or whatever. The fact is, until we get there we will not know just how profitable it might be.

Mr. Rogers errs in defining "economic return" too narrowly, both in the long-term and the short-term.

The Long-Term

Long-term, it is the promise of off-Earth resources from the Moon, Mars, asteroids and the Sun—and the stimulus from a frontier civilization—that makes space such a hope for the future. These almost unlimited resources might enable us to cease plundering our own planet, which, even if fully exploited, may be insufficient when world population quadruples within a few decades. Tom Rogers misses the point when he argues that we should instead look to developing Alaska, southern Chile, the great deserts and Antarctica (assuming we were legally able).

The Shorter Term

In the short-term, that an individual private company cannot foresee recouping an investment in off-planet development does not mean that our *economy* and civilization will not receive an economic return more than commensurate with its cost.

Confirmation of the intuitive belief that "space pays" may be found in the 1989 report by the Chapman Research Group, Littleton, Colorado (summarized in the *Proceedings* of the National Space Society's 1989 Space Development Conference held in Chicago).

That study examined just 259 *non-space* applications of NASA technology during just the eight years 1976-1984. The study found that these 259 applications generated in that short period more than:

◊ $21.6 billion in sales and benefits;
◊ 352,000 (mostly skilled) jobs created or saved and;
◊ $355 million in federal corporate income tax.

Other additional benefits, not quantified in the study included:

◊ state corporate income taxes;
◊ individual personal income taxes paid by those 352,000 workers in largely new industries (e.g., computers, electronics, fabrics, composites, ceramics and metallurgy) and;
◊ incalculable benefits resulting from lives saved and an improved quality of life.

The 259 applications represent only about *1 percent* of an estimated 25,000 to 30,000 space program spinoffs.

While all government spending results in government purchases, employment and taxes, spending on space goes far beyond that. The benefits cited by the Chapman study were *in addition to* benefits in the space industry itself and *in addition to* the ordinary multiplied effects of any government spending.

The space program utilizes our most productive people. Shifting space funds to other programs might simply put to work the current unemployed while simultaneously putting out of work our skilled aerospace workers. If we wait for space development until all other social problems are solved, we will wait forever.

Tom Rogers errs when he glibly suggests that "jobs could be created more efficiently by other federal activities that would also add to our national wealth, clearly and promptly," and that the space station program will "involve thousands of technology developers and engineers that otherwise could be engaged in the production of private sector goods and services."

The fact is, the government has never found a way to shift such people into equivalent non-space jobs. Thousands of technical people who used to build rockets are now driving taxis, operating restaurants and stores—all productive, but not building the technological industrial base that will be needed in the next decades.

When space program money was spent, new industries were left behind to generate more money, our economy's "seed corn." "Spinoffs" are so-called because they are not foreseen. We could—would—never devote the necessary resources to developing each of them—even if we had conceived of them. Investing in space gives us *both* a spacefaring capability *and* a new technological industrial base.

If we ask, "Can we afford space?" we now know the answer is yes. To the better question, "Can we afford not to invest in space?" the answer is no.

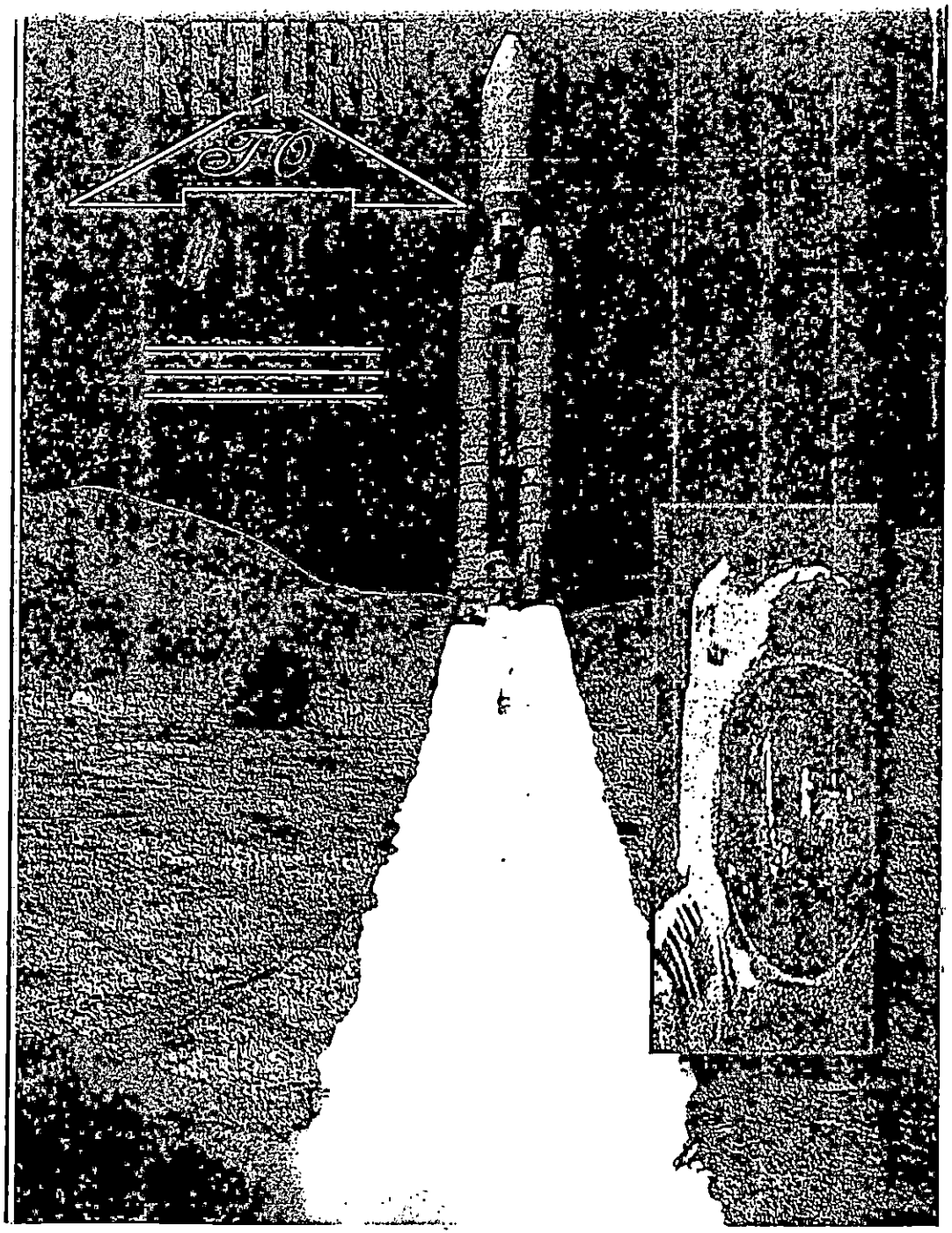
We should heed the president of a large Japanese company (NEC) who was recently quoted as saying, "The space field is the key to winning the high-tech competition with the United States and Europe."

Why the Moon and Mars, and Now!

Many of the space technologies we have today would not have been developed merely for robotic probes. Nor do machines alone have the flexibility to exploit off-Earth resources. Human settlement of the Moon and Mars is the essential first step in securing those needed resources.

And off-world settlements will at the same time inspire and invigorate our culture. As Arthur C. Clarke has been quoted, "Men need mystery and romance as much as food and shelter." The challenge of escaping the cradle of our planet of birth has the power to propel us to new heights of accomplishment.

America grew by sending out seeds to different places and then filling in the spaces with trade and industry and new ideas. People have always found ways to prosper from their environments, however harsh. And we will do so on other worlds. But we must heed the lesson and not shrink from that challenge. ☆



The Space Exploration Initiative is currently stalled at the starting gate, not through lack of know-how, but through lack of money. NASA knows how to launch a Lunar mission—after all, 20 years ago it launched six. The problem is how to build a Moonbase when faced with a political environment that refuses to support the Apollo levels of funding required to accomplish a Lunar program using brute-force means. Having a heavy lift launch vehicle (like the Saturn 5 class (140 tonnes to low-Earth-orbit) would be great, and its development should be a high priority for any SEI program. But what if we don't have one? If the program is restricted to the use of launch vehicles in the shuttle or Titan 4 class, must the human Lunar program then be stopped dead in its tracks?

Not necessarily.

Low Budget Launchers

Our existing modest launch capability could be used to support a human Lunar program provided that, instead of sending everything needed from Earth, we go to the Moon prepared to use the tremendous resources that are already there. The key is to implement in-situ production on the Moon of oxygen propellant prior to the initiation of human Lunar operations. Using the leverage Lunar oxygen production offers radically scales down the size and up-front cost of the entire transportation system. Used in this manner, the investment required to develop such an automated Lunar oxygen production capability will provide a return much greater than the development cost—even before the first human Lunar mission is flown.

"Compact Lunar Direct" is such a minimum cost Lunar transportation system. Using present day launch technology and in-situ oxygen production, it would allow us to return to the Moon affordably—and soon.

It requires the launch of either two Titan 4 vehicles or a Titan 4 and a space shuttle, either of which can presently lift 20 tonnes to low-Earth-orbit. One of these vehicles lifts a transfer stage, which could either be a chemical or a nuclear thermal rocket (NTR) stage. The other launch vehicle brings to orbit a Lunar Landing and Earth Return Vehicle (LERV).

The LERV is essentially an Apollo capsule mounted on top of a chemical stage that can use as propellant either oxygen/hydrogen, for highest performance, or oxygen/methane, for ease of storage. Once in low-Earth-orbit, the LERV and the transfer stage meet and dock. The transfer stage is then used to send the LERV to the Moon, and, in the case of an NTR transfer stage, performs Lunar orbital capture as well. The LERV then undertakes the remaining burns required to land itself on the Lunar surface.

Many today are willing to postpone an advance on the Moon until a baggage train can be put together that is sufficient to allow us to proceed without using Lunar resources...

The LERV lands on the Moon with enough hydrogen or methane to accomplish a direct return ascent from the Lunar surface to Earth, but without the required oxygen to burn the fuel. However, awaiting the LERV is a small, automated Lunar oxygen production plant. This plant supplies the LERV with an amount of oxygen about equal to the LERV's weight. Because the LERV hasn't had to haul oxygen to the Moon from Earth, the need for heavy duty launch vehicles and transfer stages is cut in half.

After conducting operations on the surface of the Moon for an extended period—without having to worry about any liabilities left in Lunar orbit—the astronauts perform a direct ascent and return to Earth. This simple direct return strategy is practical, because with propellant being supplied on the Moon, rendezvous with propellant stages in Lunar orbit is unnecessary. Approaching Earth, the LERV propulsion stage is expended, and the capsule performs an Apollo-style re-entry.

The central idea to Compact Lunar Direct is that the ability to ship a crew of several astronauts, with no cargo, back and forth between the surface of the Earth and the surface of the Moon represents the true minimum capability required to support a human Lunar base. When cargo is required, it can be sent in a stripped down LERV propulsion stage used as a one-way expendable landing vehicle.

A good benchmark for the mass required by a habitat for astronaut transportation is provided by the 6.2 tonne Apollo command module capsule, which supported a crew of three astronauts for up to two weeks and performed re-entry as well. If our transportation system can move a 6.2 tonne capsule back and forth between the Earth and the Lunar surface, it would appear that a viable human Lunar program can be sustained.

Results of a study of the Compact Lunar Direct plan show that this can be accomplished, based on two launches per mission of either the current Titan 4 or an upgraded Titan 4—or Titan 4-U—which incorporates a hydrogen/oxygen second stage in place of the Titan's current storable-propellant second stage. The Titan 4-U could be developed for a cost of about an order of magnitude less than that required for a new heavy lift launch vehicle. It would increase the low-Earth-orbit delivery capability of the Titan 4 from its current 20 tonnes to 30 tonnes. On a bare bones budget, the standard Titan 4 could be used together with a Centaur transfer stage. The resulting cost to launch the program would be extremely low, since the LERV is the only new piece of flight hardware that would need to be developed.

Lunar LOX

But for this plan to work, we need a method of producing Lunar oxygen that can be automated. A key attribute for such a process is that it should not require any beneficiation—pre-production refinement or processing—of the soil.

One often discussed production process focuses on the mineral ilmenite. Unfortunately, ilmenite is not plentiful in high concentrations in many places on the Moon, and it requires refinement of the Lunar soil before the oxygen production process

can even begin. There are, however, processes that do not require soil refinement and that have been studied extensively. One such is the "carbothermal reduction process," researched by Sanders Rosenberg and his collaborators at Aerojet during the 1900s.

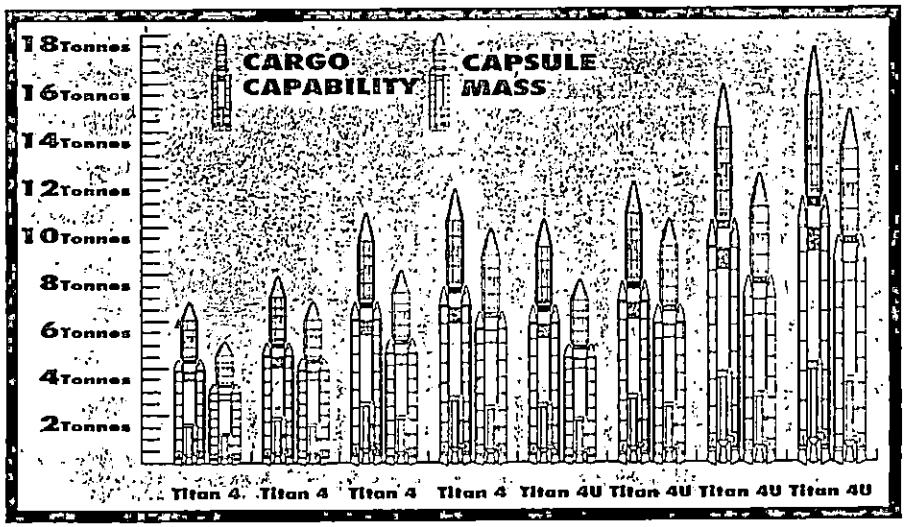
The carbothermal process begins by heating any type of Lunar soil or rock with hot methane. This reduces the Lunar material to a mixture of iron and silicon metal, and magnesia and alumina slag. In addition, it produces an output stream of carbon monoxide and hydrogen gas. These two gases are fed into what is called a "Sabatier reactor" where they will combine to produce methane and water. The methane is returned to the beginning of the carbothermal process to reduce more Lunar soil.

While water may douse fires on Earth, on the Moon it will help light the fires for the LERV's return. In the last step of the carbothermal process, the water is condensed and electrolyzed to break it down into its two chemical constituents—hydrogen and oxygen. The hydrogen is recycled back into the Sabatier reactor, and the oxygen is liquefied and stored for future use as propellant.

Because it is susceptible to automation, such a processor could be tested on the Moon well in advance of the initiation of the human program. A prototype of such a reactor could be delivered to the Lunar surface aboard NASA's small Lunar lander "*Artemis*," currently planned for operation by the mid 1990s. About 30 percent of the mass of typical Lunar soil or rock can be extracted as oxygen using the carbothermal process. Each tonne of oxygen produced over the course of a year would require 0.8 kWe of power. A 24 kWe power source would thus be able to produce 30 tonnes of oxygen a year (a production rate of about 3.5 kg per hour), sufficient to support the return propellant requirements of two to four missions, with large supplies of oxygen left over. This excess could be used as reserves for breathing, for ground vehicle use, or for producing water for drinking or rehydrating foodstuffs brought from Earth. All told, the mass of consumables required to support a base's crew could be reduced by a factor greater than five.

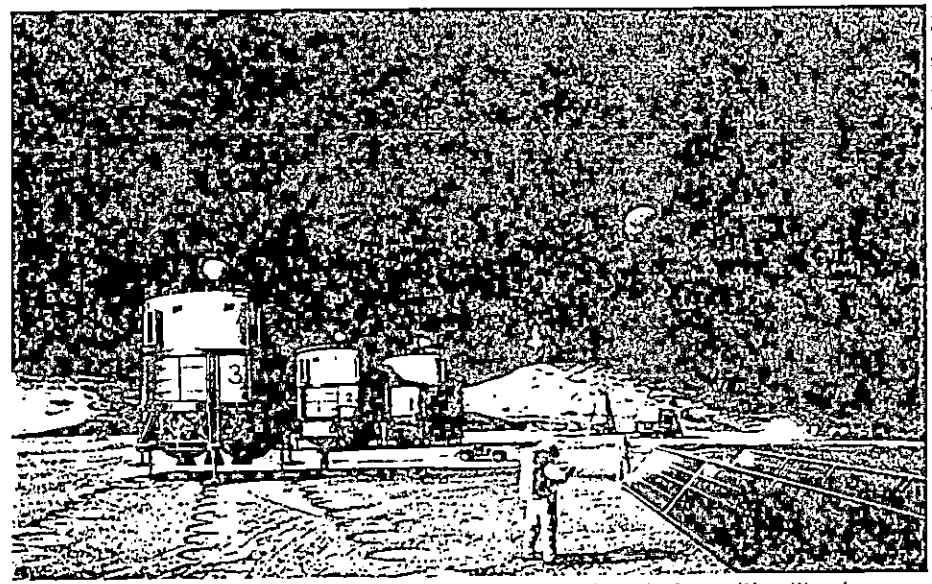
The Moon and Beyond

The production of Lunar oxygen can allow us to establish an initial foothold on the Moon without waiting for the development of a heavy lift vehicle. And it will allow us to establish a large human facility as soon as a heavy-lifter is available. If shuttle-derived technology is used, a heavy lift vehicle consisting of an external tank with four shuttle main engines, two solid rocket boosters and a hydrogen/oxygen upper stage can be assembled. This vehicle could deliver about 120 tonnes to low-Earth-orbit, 40 tonnes to low-Lunar-orbit or 47 tonnes on a direct trajectory to Mars. With 40 tonnes delivered to low-Lunar-orbit, massive habitats or cargo shipments carrying 24 tonnes of equipment and supplies can be delivered to the Lunar surface with each launch.



TRANSFER STAGE	CHEMICAL	CHEMICAL	NTR	NTR	CHEMICAL	CHEMICAL	NTR	NTR
LERV FUEL	METHANE	HYDROGEN	METHANE	HYDROGEN	METHANE	HYDROGEN	METHANE	HYDROGEN
LUNAR OXYGEN	6.0	6.3	8.8	9.0	9.0	9.5	13.2	13.5

Nearly all of the various Compact Lunar Direct configurations offer a capsule mass greater than the 6.2 tonne Apollo capsule. In the graph above, "Cargo Capability" refers to the one-way cargo delivery capability of the LERV, while "Capsule Mass" refers to the maximum mass the crew capsule can have under a given configuration. Lunar oxygen refers to the amount of lunox (in tonnes) required for the LERV return. A specific impulse of 380 seconds was assumed for oxygen/methane propulsion, 465 seconds for oxygen/hydrogen and 850 for nuclear thermal (NTR) propulsion.



Artwork, Martin Marietta

A heavy lift launch vehicle could support the development of a full-scale Lunar base. Moreover, similar habitats and Earth-return vehicles could be used to support human missions to Mars.

Alternatively, Earth return vehicles with a mass of 12 tonnes each could be delivered, together with four tonnes of storable methane fuel and about eight tonnes of cargo. Such vehicles could be sized big enough to support the rotation of large crews (10 at a time) in and out of the Lunar base. Large crew rotations would be useful, since the combination of heavy lift launch capability and Lunar oxygen allows for the support of a rather large base.

The same hardware could also be used as the basis of a "Mars Direct" mission plan to explore the Red Planet. In this a case, an Earth return vehicle, capable of supporting a crew of four during a six-month return journey to Earth, would be launched to Mars. Accompanying this vehicle would be an alternative set-up of the same Sabatier reactor and water electrolysis units used in Lunar oxygen production. Once on the Martian surface, the Sabatier reactor and electrolysis units would make use of Mars' carbon-dioxide atmosphere along with a small amount of onboard hydrogen to produce methane/oxygen fuel for the return vehicle. Following two years later, a crew of four in a large habitation module would be launched to Mars by the upper stage of the heavy lift booster. On landing on the plains of Mars, they would rendezvous with the now-fueled Earth return vehicle.

Propellant produced on either the Moon or Mars will also enable the use of high powered ground vehicles using combustion engines for regional exploration and rapid construction. In addition, small, long distance rocket ballistic hopping vehicles could be used to give astronaut explorers global reach. Providing such mobility and mobile power is essential for a cost-effective program, as it allows the crew of a single mission to accomplish exploration and construction work that would otherwise require dozens.

Coronado's Retreat: Then and Now

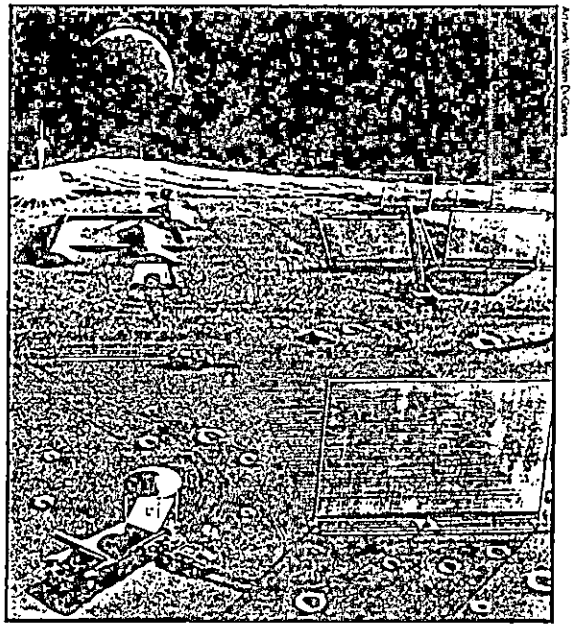
When the Spanish explorer Coronado reached Kansas, he turned back. He was low on supplies. Scanning the endless plains before him, he observed that the only fodder available for his horses on the plains would be buffalo grass, and the only meat for his men would be bison—respectively the best fodder and the best meat that there are.

In hindsight, Coronado's retreat seems inexplicable, or ludicrous, yet many today are willing to postpone an advance on the Moon until a baggage train can be put together that is sufficient to allow us to proceed without using Lunar resources. In the halcyon days of Apollo funding, such an approach may have been viable. But given the comparative paucity of Earthly resources that are available today to support a Lunar program, it is questionable whether we can afford the luxury of being so obtuse as to ignore those riches that fair Diana herself is willing to provide. The Moon is made of oxygen, and so is rocket propellant, and so are we. The sooner we recognize that fact, the sooner she will make us a home. ☆

Robert Zubrin is a senior engineer at Martin Marietta Astronautics in Denver, Colorado.

MEETING EARTH'S FUTURE POWER NEEDS BY CARRYING MOONBEAMS IN FROM NEAR

BEAMING INTO THE FUTURE



Artwork: William D. Gooch

Lunar power bases could be the answer to Earth's energy needs. Tent-shaped photovoltaic cells on the lunar surface convert solar energy into electricity. Microwave transmitters, buried under small mounds of lunar soil, beam the power to Earth via the large, rectangular reflector in the foreground.

Power from heaven. Clean, efficient, waste free. No burning of fossil fuels, no nuclear waste to dispose of. And not only is it good for Earth, but it's also a great way to make space profitable.

The official name of the concept is Lunar Power System, or LPS for short. The unofficial name is Moon Beaming. Sure, crack all the Jerry Brown jokes you want, but, if LPS proves its worth, no one will be laughing as we harvest a bounty of cheap, pollution-free power with the added benefit of a booming space settlement program to boot.

The concept is simple. Pairs of massive collection stations, Lunar Power Stations, on opposite limbs of the Moon collect solar energy and, via microwaves, beam the electricity back to receiving antennas on Earth.

Why the Moon?

The idea of placing solar energy outposts in space first arose in the 1970s. Many people hoped that Solar Power Satellites—orbiting platforms that would collect the Sun's rays and beam power down to Earth—would provide not only an answer to the planet's energy woes, but also a tangible example of the enormous economic benefits space holds. Here was an *economic* reason to blast off to the heavens. NASA and the Department of Energy spent about $30 million on feasibility studies of the concept, and found that while the concept had promise, it also hosted some potential problems.

One such problem centered on the size of the antennas used in the SPS scheme. To make the concept work required a very large antenna somewhere, either on Earth or in space. If the receiving antenna—called a rectenna—were small, the sending antenna would need to be huge, on the scale of tens of kilometers in length. But antennas of this size in Earth orbit would be vulnerable to collisions with space debris. Conversely, the sending antenna could be small and the rectenna enormous. But, this was not a perfect solution as land on Earth is expensive and an ever-disappearing resource. And, as might be expected, cost was a serious consideration. Building solar satellites several kilometers in length would require a huge investment in the transportation of not only the solar cells, but also their supporting structures.

In 1977, the late space visionary Gerard O'Neill suggested an answer to the problem of lifting materials from Earth: build most of the SPS platforms in space factories using raw materials from the Moon. Then transport the finished SPS to orbits about Earth. That, in turn, raised a simple question: why not use the Moon itself as the platform for the solar collectors and their accompanying transmission equipment? That is just what LPS does.

Power from the Moon

A full scale Lunar Power Base capable of sending back several thousand gigawatts of power, enough to supply all of Earth's needs, consists of thousands of "power plots" arranged along the limbs of the Moon: Each of these power plots includes a field of solar arrays, a microwave transmitter and a microwave screen reflector.

At each plot, fields of solar arrays collect the Sun's rays. These arrays, shaped like pup tents, are arranged so their long ends are aligned with the Moon's meridian—a line drawn between the Moon's north and south poles. This way, the Sun uniformly illuminates the arrays during the Lunar day. Photovoltaic cells on the surface of the arrays would convert solar energy into electricity, providing a steady stream of electric power to a microwave transmitter for beaming to Earth. The transmitter sends its beam toward a large billboard-like reflector that directs the beam to Earth. Because the Earth stays in the same region of the Lunar sky, the reflectors do not have to be moved to track the Earth, thus making their construction much easier and cheaper.

While each reflector is small, the combined area of the reflectors produces what is, in essence, a transmitting antenna 30 to 100 kilometers in diameter. Likewise, while the individual power beam from each plot is small, when all beams are added together, the combined beam becomes very powerful—ideally providing about 20 percent as much energy per unit area at the rectenna on Earth as does a high-noon Sun on a clear day. Almost all the microwave energy can be converted to electric power.

Fine directional control for following the Earth-bound rectennas as Earth rotates is achieved by controlling the beams from each transmitter.

WHILE LPS MAY BE AN OUT-OF-THIS-WORLD CONCEPT FOR POWER GENERATION, IT IS BASED ON RESOURCES, KNOWLEDGE AND TECHNOLOGIES THAT ARE GROUNDED IN REALITY.

much as a person holding a flashlight close to a mirror in a darkened room can move the reflected beam of light about the room with only a flick of the wrist.

The large size of the sending antenna is important because it allows the size of each Earth-arriving beam to be on the scale of only a few hundred meters across at Earth. Rectennas can be reasonably compact and still be capable of converting the arriving microwaves into direct current electricity for distribution through terrestrial power systems. Because an ideal Lunar Power Base has thousands of individual transmitters, many different power beams can be sent simultaneously to many different receiving locations on Earth. Those receiving stations can be built by governments, commercial interests and private local groups—anyone who needs power. What's more, simply increasing the diameter of a rectenna can increase the amount of electricity available for distribution.

As an added benefit, the system is very redundant. The thousands of power plots used in LPS make it possible to shut many down at any one time for repair work without disrupting the flow of power.

DAVID R. CRISWELL

Once a Moonbase is built, construction on power plots could start. Small automated tractors, a few times the scale of the Apollo Lunar rovers, could be put to work gathering Lunar materials, extracting metals from regolith, laying out solar collectors, burying power collection wires under solar arrays and burying microwave transmitters. Portable solar furnaces could be used to melt soil and extract both the glass to make the solar panels and the fibers that would be used to provide the framework for the microwave reflectors.

Demonstration power plots could certainly be part of a human research base. In fact, tacking on an extra 20 percent to a research base's costs would cover construction costs for a moderate sized LPS. Power from the LPS would, in the course of a few years, return the cost of establishing the base in the first place.

Too Good to be True?

As good as LPS sounds, the idea is not without its obstacles, but it appears that they can be overcome with enough ingenuity.

Even with two Lunar Power Bases, one on each limb, there will still be a three-day period each month when neither base will receive enough sunlight to produce full power. There are at least three ways to solve this problem. One is to extend each base across the local limb. A required number of power plots would always receive solar energy. In this scenario, it would be necessary to have a network of power lines across the Lunar limb. Even if a power plot was not in direct sight of the Earth, its power could be sent to a microwave transmitter and reflector that are in direct sight of the Earth.

Placing many reflectors into Lunar polar orbit could offer another solution. These reflectors would direct sunlight to darkened power plots. A third solution would provide some sort of power storage capacity—either on the Moon or on Earth—that would carry the world through the "dark days." Massive power storage facilities employing high-temperature superconductors might be able to store large quantities of power at low cost. Existing hydro-electric dams could be converted to pumped-storage/genera-

tor facilities.

Total eclipses of the Moon present similar dilemmas. During the deepest eclipse, Earth blocks sunlight from reaching the Moon for about three hours. Since this is a relatively short period of time, power storage would appear to offer the simplest solution.

In addition to obstacles in the Lunar environment, there are also a few Earth-bound hurdles that may have to be overcome. Because of the Earth's atmosphere, the Moon will need to be about 20° above the horizon before a rectenna could begin receiving power beams from the Lunar surface. But there is no single point on Earth that can boast such a line-of-sight 24 hours a day, 365 days year. So what can be done to ensure uninterrupted power beaming?

One option, proposed for other global power systems, is to build a global electrical distribution grid, much as regional groups of power companies do now, that will connect all rectennas, power storage facilities and users. As one receiving station passes out of the proper orientation, beaming is switched to another station capable of receiving power. An alternate solution might lay with Earth-orbiting, microwave-reflecting satellites at moderate altitudes and high inclinations. Microwave beams arriving from the Moon could be redirected to rectennas that do not have a direct line-of-sight to the Moon.

Clean, Cheap *and* Safe

LPS power can be safe and low in cost. If the beam sent from the Moon has 20 percent of the intensity of sunlight falling on Earth's surface, the cost of Moon power would drop to a few tenths of a cent per kilowatt-hour. Currently, consumers in the United States pay an average of eight cents per kilowatt-hour. Moreover, the rectennas of such a system would use only about 5 percent of the land currently being used for power production in the United States.

The very large antennas used by LPS to direct power to Earth reduce the stray power around a beam to a small fraction of the safe levels specified in guidelines in the United States. LPS can be environmentally neutral, even if 50 times more electric power is provided than is now used on Earth. LPS can safely provide both low and high power beams. Rectennas in extremely isolated regions could receive more intense beams and output very low cost power. People in planes flying through a beam wouldn't have to worry because the metal skin of a plane, like the metal box of a microwave oven, effectively blocks microwaves.

At 230 watts per square meter, the power beam is only 4 percent of the intensity of most microwave ovens. Small animals, such as birds or mice, would feel some heat, but they would not experience a significant rise in body temperature. If people so decide, the LPS power beams can be operated at as low as 0.2 percent of the density of a microwave oven and still produce electricity at near present-day costs. This is a smaller power level than the leakage allowed from a microwave oven (50 watts per square meter). Stray microwaves are 10,000 times less intense than those in the main beam. The stray power absorbed by humans close to one beam, or from a full 20,000 gWe global power system, would be less than the power of the light from a full Moon. LPS can be operated such that neither the primary nor stray power affects life on Earth.

LPS WILL ESTABLISH A PERMANENT TWO-PLANET ECONOMY BETWEEN THE EARTH AND THE MOON.

Full Power Ahead

A mature LPS may include sets of photovoltaic cells across the limbs of the Moon, solar mirrors in orbit about the Moon and three to five hours of storage on the Moon or Earth. The fully mature system will also certainly include at least some microwave relay satellites in Earth orbit.

While LPS may be an out-of-this-world concept for power generation, it is based on resources, knowledge and technologies that are grounded in reality. LPS is built from common Lunar resources that are well understood. Industry is now able to design and provide the solar cells, microwave circuits, microcomputers, rectennas and automated means of production LPS requires. We fully understand how to design and build LPS. Laboratory and field demonstrations can begin immediately on the production of glass components and solar cells appropriate to Lunar conditions. The design and demonstration of robots to assemble LPS components and construct the power plots can be done at the same time.

Indeed, realistic demonstrations of power beaming can be done in parallel with NASA's planned robotic Lunar landers. The radio transmitters on the landers could be coordinated to send very low power test beams from the Moon to Earth. These lander tests would confirm the Moon as a completely stable platform for beaming power to Earth. Large radar installations on Earth—already used for ballistic missile tracking—can be readily modified to project full scale microwave beams to low-Earth-orbit, where satellites can monitor them. The space shuttle could deploy prototype reflectors to reflect those beams back to rectennas on Earth.

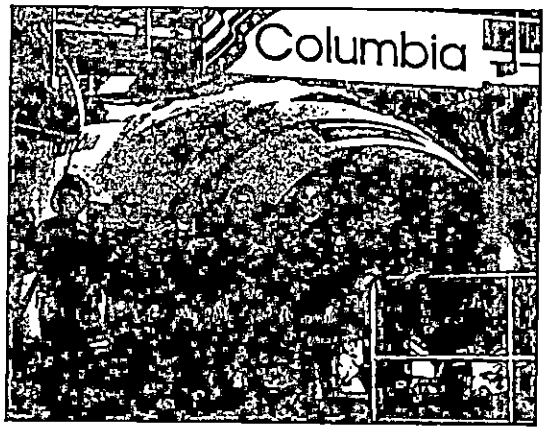
Two-Planet Wealth

An LPS demonstration can be a minor addition to a national or international Lunar base program. With a larger commitment, LPS can grow quickly to meet most of the energy needs of the world. Global wealth can grow far beyond the levels possible with current, more expensive forms of energy. Coal and oil can be saved and used for other, high-value applications. Dependable, inexpensive energy from rectennas will stimulate regional economies and expand international trade.

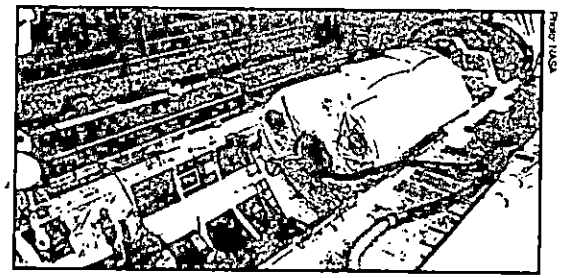
LPS will establish a permanent two-planet economy between the Earth and the Moon. The two-planet economy can deploy large vehicles and permanent facilities throughout the solar system. And they will ride on the tips of solar power beams projected from the Moon. ☆

Dr. David Criswell is the Director of the Institute of Space Systems Operations at the University of Houston and is co-inventor, with Dr. Robert D. Waldron, of the LPS concept.

landed without difficulty," he explained. "[But] it's a challenging task to land a very high-speed space shuttle. We'll build up incrementally and try to find out if there is a cliff, as far as human physiology is concerned, in the ability to quickly readapt to 1-g after a lengthy stay." Adding that he planned to exercise and take fluid-loading countermeasures prior to deorbit, Richards commented, "Frankly, I'd like to say as a pilot that we could come back in 90 days and still land the vehicle well, but right now I don't know. To make sure we're not making decisions in the future based on false premises, there's a proposal to do a demonstration of the capability we've had since STS-1, to do an automated landing." That test is planned for mission STS-53, scheduled to launch in October 1992 and commanded by David M. Walker.



The seven crew members of STS-50. Left to right: Ellen Baker, Kenneth Bowersox, Bonnie Dunbar, mission commander Richard Richards, Carl Meade, Eugene Trinh and Lawrence DeLucas. Below: The U.S. Microgravity Laboratory-1 Spacelab module has been placed in *Columbia's* payload bay. The tunnel connecting the shuttle with the module has not been installed yet.



Stretching Toward the Future

Saucier estimated the costs for the EDO program, including *Columbia's* modifications and the "scar" on *Endeavour*, as "in the low three digit millions." *Endeavour*, the newest orbiter, has been "scarred" or equipped with the necessary plumbing and wiring so it could be converted to a 16 or a 28-day vehicle, if needed. *Columbia*, the only orbiter now being outfitted for extended missions, is too heavy to fly longer than 16 days. The 28-day capability requires four more sets of cryogenic oxygen and hydrogen tanks, to be installed on the forward face of the pallet.

Longer missions will be more cost effective and provide valuable data, according to Saucier. "It costs money to launch an orbiter," he pointed out. "You can only do so much life science in 16 days, even though that triples the amount of useful time on orbit compared to a seven day mission. But we don't have an authorized project [for a 28 day mission]."

The proposal to stretch the time *Endeavour* stays docked with space station *Freedom* up to 30 or even 90 days during the station's tended phase has not been approved. Suggestions abound, though. One scenario envisions that prior to the launch of the habitability module, the crew would "live" aboard the orbiter while working in the station's laboratory. *Freedom's* solar panels would supplement the orbiter's electrical power, and other supplies would be carried by a logistics module mounted in *Endeavour's* payload bay. The shuttle could also function as an emergency escape vehicle until a "lifeboat" has been developed and *Freedom* achieves permanently-crewed status.

However, there are limitations to the science one can do when the orbiter is docked to *Freedom*. The orbiter puts out fluids, water and propellants that contaminate the space environment. Also, the docked shuttle would disrupt the stable microgravity environment aboard the station required for delicate experiments and would necessitate additional fuel to reboost the station's orbit.

Indications are that phenomena such as bone demineralization and cardiovascular deconditioning increase in severity with time. And, as Richards pointed out, "As we go out to 28, 30 or 90 days, there's got to be some point at which we need to get a shower on board the orbiter. The Soviets have found a shower to be good on *Mir*. People just aren't efficient if they feel dirty."

Given the success of *Mir*, you would think that there is a wealth of information available from Russian studies of human responses to zero-g. While Saucier concedes that data from *Mir* "does give us insight," he cautions that the data tend to provide "qualitative, not much quantitative data." And, as on Skylab, *Mir's* cosmonauts return on a ballistic trajectory in a reentry capsule—they don't have to land a spaceship after their long missions.

If the "cliff" that, on entering a gravity well from space, impairs an astronaut's ability to land or to escape from the vehicle during an emergency can be eliminated by appropriate countermeasures, our ability to explore and exploit space will be significantly enhanced. ☆

Betty Nolley is a freelance writer who works out of Houston, Texas.

TOUCHDOWN

LUNA 2010—the 51st State

by Charles R. Miller

A growing number of people are disenchanted with the direction and pace of our nation's space program. They are wondering if we will ever have a *real* space program.

I am one of these people.

Every opinion poll indicates the American people are dissatisfied—broad, yet extremely shallow support—and less supportive than in previous years of our country's efforts in space. And how can you blame them? Our leaders have proposed a $500-billion, three-month vacation on Mars for eight government employees.

What do we, the American people get? Pretty pictures of flags and footprints.

We want a real space program. A program that will allow hundreds, if not thousands, of people to colonize space in our lifetime.

To this end, the California Space Development Council has developed *LUNA 2010: A Space Colonization Initiative.*

The LUNA 2010 Initiative proposes that the United States should:

- ◊ negotiate an amendment to the Outer Space Treaty of 1967, or legally withdraw from the treaty, on or before 31 December 1998;
- ◊ claim the northern hemisphere of the Moon as the territory of the United States of America;
- ◊ establish a permanent Lunar settlement of at least 100 people by the year 2010;
- ◊ grant 100 square miles of land on the Moon to any U.S. citizen who can survive on U.S. Lunar territory for six months; and
- ◊ develop U.S. Lunar territory with the intention of establishing the 51st state of the United States of America.

As a member of the NSS Board of Directors, I believe the National Space Society must take a stand on this issue—FOR or AGAINST it. There is no middle ground. Why?

Because LUNA 2010 is a national space program, and the National Space Society is a *national* space organization.

America needs LUNA 2010. We need to find the next great American challenge. We need a direct, sustained role in the destiny of the human race.

With the end of the Cold War, the entire human species is celebrating and thanking America for its leadership. But America has lost something. We have lost the clear national purpose that drove us for the last 45 years. Today, our country is floundering. We need a new direction, a vision that defines us—as a people, and as a nation.

As the third millennium approaches, America needs something beyond economic competition, material acquisition and conspicuous consumption. We need something beyond the never-ending war against poverty, illiteracy, unemployment and crime. We need something beyond police actions and interventions in the affairs of third-world nations.

Most important of all, LUNA 2010 is a program for the American people, not just federal employees and government bureaucrats. We need a frontier for our best and our brightest; for our dreamers and our discontents; for our entrepreneurs and our philosophers; for our artists and engineers. Space will become a high national priority when it is open to all Americans.

LUNA 2010 is not anti-international. In the "New World Order," relations among friendly, democratic nations are determined by the forces of competition and cooperation. LUNA 2010 reflects this reality.

America will cooperate in joint national ventures, including global communications, orbiting science laboratories and robotic exploration. But space development and colonization will be guided by cooperation's twin—competition.

Yes, America will compete. We will fight for economic advantage by developing and patenting new technologies. We will scrap and we will scratch for the world's knowledge-intensive, high-wage jobs by improving the education of our children. We will create, nurture and protect critical industries such as commercial space transportation. And we will compete for national prestige through the U.S. space program.

To Japan, Europe and Russia, our friends and future competitors in the colonization of space, I say "America will leave you one-half of the Moon. We challenge you to meet us there. If you don't like it, we challenge you to beat us there. If you can."

As I think of the role the United States has played in the last 200 years of human history, I hear great words extolling fundamental ideas. Democracy, freedom and liberty are part of the American legacy. In another time and place, another man might have said, "We need a real space program—a space program of the people, by the people, and for the people."

But we should also dwell on the words of President Reagan, a modern day visionary, "It is mankind's manifest destiny to bring our humanity into space, to colonize this galaxy. And as a nation, we have the power to determine whether America will lead or will follow. I say that America must lead." ☆

Charles R. Miller, an NSS Director, is a former administrator of the National Space Society and a past president of the California Space Development Council.

Jerry Brown's ideas worth a second look

SCOTT BURNS

WASHINGTON — Jerry Brown and his supporters had to stomp their feet and yell to be heard over calls for Democratic unity last week in New York. As the Democrats anointed Bill Clinton as their presidential nominee and promised to restore the American Dream, the Clinton campaign played hardball and ushered Mr. Brown to the back seat.

Maybe they were a bit hasty.

You remember Jerry Brown.

The man from the flake state, king of the Sufi dancers, the presidential candidate who may not have been afraid to inhale even though he insisted he never took a toke.

Everyone remembers that.

Forgotten policies

What is not remembered is the economic policies he offered. Offered early, offered seriously, they were dismissed by mainstream Democrats and generally scoffed at by the media.

In fact, the Brown economic policies are the road not taken, offering the potential for lower tax rates, major job creation and dramatic economic growth. When compared with the platforms offered by Mr. Clinton and Mr. Bush, what is most immediately apparent is that neither mainstream Democrats nor Republicans "get it": they have more in common than they have in differences.

"I don't think enough attention is being paid to the condition of the economy. For instance, *all* of the forecasts are at 2 percent real economic growth, two-thirds of the long-term growth rate and far less than most recoveries," economist Aldonna Robbins said during a recent interview. Ms. Robbins is a former Treasury economist who works with her husband, Gary Robbins, at Fiscal Associates. Their small consulting firm builds economic models that have routinely been more accurate than those used by both Congress and the administration.

"At 3.5 percent (growth), you double the economy in about 20 years; at 2.5 percent, you double every 35 years. It's a big difference," Mr. Robbins said. "It's the difference of whether or not your kids will actually live better than you do."

End of an era

The two economists are worried that whether a Democrat or a Republican is elected in November, the brief era of declining marginal tax rates is over. Worse, they fear the future holds rising tax rates whether a Democrat or Republican is in the White House.

Please see JERRY on Page 9H.

Jerry Brown's economic policies are the road not taken

SCOTT BURNS

Continued from Page 1H.

One indication is what already has happened: After peaking in the 1970s, marginal tax rates — the tax rate paid on the highest dollar of income — declined with the early Reagan policies, only to reverse in 1986 and start climbing.

"Right now, we're heading on an upward slope for tax rates," Mrs. Robbins said.

What the two economists expect are higher spending and taxes in 1993, accompanied by an expanding deficit. Estimated tax collections from higher taxes regularly fail to produce expected new revenue. Investors see a possible $100 billion increase in the federal deficit just from tax collection shortfall.

Which brings us back to Jerry Brown and the road not taken. Here are the measures he offered:

- Abolish the payroll tax.
- Abolish the corporate income tax.
- Eliminate about two-thirds of all federal excise taxes.
- Eliminate most deductions, exemptions and exclusions from the federal income tax.
- Create a new 13 percent value-added tax to replace the payroll tax and corporate income tax.
- Reduce the personal income tax to a flat 13 percent.

revenue neutral, meaning that it would raise no more or no less than the current tax system, was flexible, subject to negotiation and easily modified to ensure that no lower-income taxpayers would pay more taxes than they do now. A major departure from current policy, the Brown plan did two vital things: It lowered the marginal tax rate on both capital and labor while preserving tax revenues. It also would have virtually ended the unequal taxation of capital and labor, making our economy a level playing field for business decisions.

What might we have seen?

Consider these projections for 1992 to 2000 from the Robbinses:

■ Job growth:	
Brown	3,028,000
Bush	617,000
Clinton	-259,000
■ Economic output:	
■ Brown	$4,687 billion
■ Bush	$1,013 billion
■ Clinton	-$136 billion

Note that the plan from Jerry Brown, the Democrat, was projected to produce nearly *five times* the job growth and output growth as what George Bush, the Republican, has proposed. Similarly, in their long-term effects on the federal deficit, the Bush and Clinton plans affected it by less than $50 billion, while the Brown plan trimmed the deficit by more than $1 *trillion*.

Projections, of course. Subject to verification by reality and likely to be argued over by others of the economist ilk.

But if we only deal with orders of magnitude, the central problem is still clear. When it comes to economic policy, Mr. Bush and Mr. Clinton have more in common than they have in differences.

FTC clears Critical Care-Medical Care merger

The Federal Trade Commission cleared a proposed merger between Critical Care America and Medical Care International Inc. on antitrust grounds Friday. The alternative health-care companies announced last month that they planned to merge. The resulting firm will be based in Dallas.

Dallas-based Medical Care International Inc. is the nation's largest operator of outpatient surgery centers, and Critical Care America Inc. is the country's biggest independent provider of home health care.

U.S. needs an industrial policy

LEE CULLUM

You won't hear much abo at the Republican Conven but the sleeping issue of year's presidential election is dustrial policy. Before he drop out of the race, Ross Perot was foremost advocate of intensi collaboration between gove ment and business. Bill Clinto not far behind, though his e nomic plan relies more on N Deal-type spending for roads, bridges, rail and o public works than on direct federal investment in r technologies. He does call for creating a governm agency to coordinate research as well as an investm tax credit. All this and more are urgently needed.

The Bush administration must overcome its re tance to "pick winners and losers," as free-market p ponents fear an industrial policy would do. Actua the president seems to be moving reluctantly in t direction, though he still denies it, according to Cl Prestowitz, a member of the Commerce Departm under Ronald Reagan and now head of the Econo Strategy Institute. Good.

Mr. Prestowitz argued that an industrial policy nothing new to the United States.

• The enormous production effort during Wo War II, which rationed consumption and encourag savings, was an industrial policy on a grand scale. the end of the war, he noted, half the produce had be shot away, but the country still had three times wha had in 1941.

• With accelerated depreciation, the governme picked some big winners in real estate during the ea 1980s, Mr. Prestowitz observed. Then it picked some l losers when those tax shelters were eliminated in 19 The oil depletion allowance operated in much the sa way.

• Tariffs on textiles have been an industrial poli So have subsidies for agriculture.

• And the most influential industrial policy of the all has been defense contracts. When commerc spinoffs have resulted from military research, the go ernment has been delighted, said Mr. Prestowitz. long as civilian byproducts are accidental, they are O But if they are planned, they're suspect.

It all goes back to our old friend, Adam Smith's " visible hand," rationalizing the market with the sile adjudication of a million decisions. But what happe to the invisible hand when a competitive Japanese go ernment protects its markets and patiently supports emerging industries, allowing them to undersell the counterparts in the United States? What happens to t invisible hand when it's given responsibility for placing with private capital the $50 billion annual vestment journalist Robert Kuttner reported the Pen gon made in technology?

The military-industrial complex gave the nati semiconductors, supercomputers and compute controlled machine tools, wrote Mr. Kuttner. Whe will the investment come from for these discoveries the future?

Like Mr. Kuttner, Bernard Weinstein and Haro Gross at the Center for Economic Development and R search at the University of North Texas call for a ne interpretation of David Riccardo's 19th-century noti of comparative advantage. Under the old idea, fr trade allowed each nation to pursue its own special bananas in Honduras, oil in Texas, etc. Each nati could do what it did best, earning revenue through e ports, and not struggle to produce those things f which it had neither the climate nor the resources.

But there's a growing opinion among economis that comparative advantage doesn't function in a vanced goods that can be produced anywhere.

Dorman Cordell of the National Center for Poli Analysis in Dallas contended that government bures cracy is ill equipped to make market deci sions. "If we had had an industrial policy toward the end of the last century," he argued, "it would have gone toward ma nure disposal. When you have the mar ketplace deciding industrial policy, it's able to adapt very quickly to change." Governments, he contended, cannot.

He has a point, but it seems to me that Mr. Weinstein is more persuasive when he argues that "we need to develop comparative advantage. We need an industrial policy desperately." Call it something else, he suggested, since industrial policy is a pejorative term in many quarters. Call it a banana. But get on with it

Lee Cullum is a contributing columnist to Viewpoints.

Treasury's debt policy a rating game

SCOTT BURNS

Suppose your banker loved you and offered you a choice of two interest rates: You could borrow at 3.5 percent or 7 percent.

Which would you choose? Right. The less it costs, the better. That's what you and I do if we have a choice.

The U.S. Treasury works differently. They pay as little as 3.2 percent for some money — and as much as 7.4 percent for other money.

Reasonable doubt

Campbell R. Harvey, an associate professor of finance at Duke University's Fuqua School of Business, wonders why. Observing the record spread between short- and long-term interest rates, he thinks the Treasury should be borrowing short and paying 3.2 percent rather than borrowing long and paying 7.4 percent.

This is not a matter of academic persnicketiness. In Mr. Harvey's view, a new Treasury policy for debt would not only save the Treasury billions in interest payments, it also would serve to bring long-term interest rates down and stimulate the economy.

"The short-term rate policy (of the Federal Reserve) has been a failure as a tool to take us out of recession. The reason is that capital investment is tied to long-term rates. So is consumer credit. And mortgages," he said recently. "What we have to do is bring down long-term rates. In the recent Humphrey-Hawkins hearings, Federal Reserve chairman (Alan) Greenspan showed significant frustration. He had lowered short-term interest rates dramatically . . . but the economy isn't responding."

In fact, while most investors gasp at the decline in short-term rates, long-term rates have fallen very little. A comparison of yield curves confirms the modest fall in long-term rates relative to short-term rates.

Lower math

According to Salomon Brothers, a major New York investment banking firm, three-month Treasuries were yielding 5.52 percent in early August 1991 but were yielding 3.22 percent at the same time this year, a drop of 230 basis points. The decline in 30-year bond rates has been far more modest, only 76 basis points. (Please see Table 1 on Page 9H.)

The unprecedented fall in short-term rates has created the steepest yield curve in history — steeper than any since measurements started in 1857.

That's right. 1857.

A recent study by the Leuthold Group, an institutional investment strategy firm in Minneapolis, showed that the median spread between short-term commercial paper rates and long-term corporate bond rates from 1857 to the present was only 42 basis points. The spread on July 31 was 470 basis points, the highest in any three-month period since 1857.

Message?

In more normal times, it does not cost the Treasury much to borrow some money long term and some money short. But these are not normal times: The Treasury is paying a massive premium to borrow long.

Mr. Harvey offers an alternative.

"My idea is that we can bring down long-term rates and stimulate the economy very easily," he said. "All the Treasury has to do is tilt the maturity structure of the debt — offer more in the short term."

I asked what he met by "tilt," and he explained that about $600 billion in Treas-

Please see TREASURY'S on Page 9H.

Modest Bush economic plan could be a plus

SCOTT BURNS

The Republican economic platform may lack drama, but it will modestly increase employment, output and tax revenue. That conclusion comes from a new study by Gary and Aldonna Robbins, two researchers for the Dallas-based National Center for Policy Analysis.

More importantly, while President Bush's plan has much to be modest about, the Robbinses' study concludes it will produce gains for the economy while Democratic challenger Bill Clinton's plan will produce losses.

At a glance

With the exception of the very conditional tax cut offer Mr. Bush made during his Thursday night acceptance speech in Houston, the Bush plan is familiar, limited and simple:

- Cut the capital-gains tax to 15.4 percent from 28 percent.
- Provide new incentives for investment in equipment.
- Provide a tax credit for first-time home buyers.
- Remove some of the passive loss restrictions in real estate.

Compared with the dramatic changes offered by former presidential candidate Jerry Brown, the Bush plan is restrained, nearly living within the rules of current budget restraints.

The Robbins/NCPA study, for instance, projects the Bush plan would produce 26,000 new jobs in 1993 while adding $13.9 billion to economic output. After 1993, the economic benefits would rise rapidly, reaching 369,000 new jobs by 1996 and $100 billion in new output.

The plan does this by making a small cut in the marginal tax rates on labor and income. The cut, the NCPA economists believe, will stimulate new investment and create jobs. As they figure it, the Bush plan would increase the after-tax income of investors by nearly $6 billion during the next five years. As a result, investors would commit to new investment, creating $140 billion in new wages and nearly $100 billion in new tax revenue.

Not a bad payoff for allowing investors to have more income.

The Clinton plan, which involves increased taxes for high-income households, would work to raise the marginal tax rates on labor and capital while imposing new costs on business such as "pay or play" health insurance. The consequence, according to the NCPA study, is that the Clinton plan will result in lost jobs, lower output and reduced federal revenues.

Ironically, while the Clinton plan calls for the rich to pay their "fair share," the Robbinses' economic model shows that the burden will be far higher for those who work than on those who collect bond coupons. They estimate that after-tax capital income will decline by $1.4 billion while after-tax labor income will decline

AT A GLANCE
HOW THEY STACK UP

The projected results of the two economic plans by 1993-1996:

Area	Bush	Clinton	Diff.
Jobs in thousands	369	-747	1,116
Domestic product in billions	$226	-$173	$399
Investment in billions	$855	-$413	$1,268
Federal deficit in billions	$9.5	$113.3	$103.8

SOURCE: National Center for Policy Analysis

Please see BUSH on Page 9H.

Letters to the Editor

Starving Economy—Please Feed!

Your Aug. 31 editorial urging President Bush to index capital gains by executive order, "An Act of Leadership," could have been even stronger. You say the "capital gains rate is not the only thing slowing the economy," but is "merely part of a generalized prejudice against risk, enforced by back-seat bank regulators and an epidemic of regulatory lawsuits." In fact, if capital gains were indexed, to protect the nation's capital from inflation, much of the generalized prejudice against risk would recede. In that sense, capital gains taxation is the bone in the economy's throat, itself capable of choking off growth.

Very few economists understand the problem because they view the economy as being driven by consumer demand. They can even prove that the rate of capital gains taxation has negligible effect on savings and investment. In a supply model that focuses on the producer, savings and investment are secondary functions. A bigger economy automatically means consumption and savings increase.

To a supply side economist, the U.S. is now saving too much. Eleven million workers are idle, saving their effort. Many hundreds of thousands of would-be proprietors and managers are idle, too, saving their expertise. Factory capacity is being saved and commercial real estate is collecting cobwebs. The clock is ticking while we save ourselves from producing trillions of dollars of goods and services — because the economy is starved for capital.

These saved-up factors of production cannot be assembled unless the marketplace decides that the entrepreneurs who would do so stand a chance of producing a positive return on investment. Entrepreneurs are not thwarted by a high capital gains tax rate; they all believe they will succeed. It is the financial service industry — the source of capital in the marketplace — which must refuse to allow resources to flow to returns on investment they reckon as negative.

A market economy, after all, is built around the idea that most new businesses will eventually fail, which they do. The economy advances as a great many people take chances, with those succeeding employing those who fail. If three of five enterprises fail, the return on investment on the five must offset losses on the three — and the market does not know in advance which will succeed.

The capital gains tax reduces the return on investment; a higher ROI must increase the flow of capital to new enterprises for the market to be efficient. When inflation can be taxed, as if it were capital gain, the return on aggregate new enterprise is reduced dramatically. Not only must the successful enterprises face capital gains tax, the failures must face it too.

This is why business start-ups continue to decline, as they have every year since 1987, when the capital gains tax rose to 28% from 20% on both real and inflated gains. In the 1980s, the tax on labor income declined sharply and such ordinary income was protected from inflation through indexation. At the same time, the tax on capital income rose, without protection from inflation. It should be no surprise there is now an abundance of labor in the market and a great shortage of capital.

If the president were to index capital gains by regulation, the return on investment on aggregate new enterprise would instantly soar. Clusters of entrepreneurs turned down for credit would find it thrust upon them. A veritable mountain of unrealized capital gains—inflated and real—would be liberated, permitted now to flow to higher and better uses.

How big a mountain? Gary and Aldona Robbins of Fiscal Associates in Alexandria, Va., estimate $7 trillion — 25% of the nation's total capital. The average family would have $70,000 in assets removed from the threat of taxation. The relief would be considerable, not just to a handful of very rich people. It would touch almost all Americans, in the process reviving the wellsprings of entrepreneurial capitalism. It's not a small thing. It would be a shame if the president decided against it.

JUDE WANNISKI
President
Polyconomics
Morristown, N.J.

AT A GLANCE
THE LONGER THEY ARE, THE SHORTER THE FALL

Treasury yields in percent.

Maturity	1991 Aug. 6	1992 Aug. 6	% point difference
3 months	5.52%	3.22%	-2.30
1 year	5.80%	3.53%	-2.27
3 years	6.91%	4.72%	-2.19
5 years	7.53%	5.68%	-1.85
10 years	7.99%	6.17%	-1.82
20 years	8.19%	6.65%	-1.54
30 years	8.22%	7.46%	-0.76

SOURCE: Salomon Brothers

Treasury's debt policy a rating game

SCOTT BURNS

Continued from Page 1H.

tury bills (maturities of one year or less) would be renewed in the next year; $320 billion in notes and bonds; and $400 billion in new debt, a total of $1.3 trillion.

Normally, the Treasury would cover that by issuing $700 billion in new bills and $620 billion in new notes and bonds at higher interest rates. As an alternative, he suggested they issue $850 billion in bills, $250 billion in one- and two-year notes, and only $220 billion in longer notes and bonds.

Mr. Harvey estimates that the interest savings on shorter maturities, alone, would be $12 billion a year. More importantly, he believes, the reduced supply of long-term bonds will work quickly to bring lower short-term rates, who is)

"The primary beneficiary (of the current situation) is the banks," he said. "The banks can make money simply by buying Treasuries. But it has not benefited the consumer."

Skeptics should consider the yield curve. If a bank can take in deposits at 3.22 percent and reinvest them in five-year Treasury notes earning 5.68 percent, they will earn a spread of 246 basis points.

That's more than enough to run a very profitable bank — once you terminate the loan department. That is exactly what has been hap-

stimulate the economy.

"What the Fed is doing is inconsistent with belief in a low, long-term inflation rate," he said. "If you believe in low inflation, you should finance short. As soon as they announce a policy shift (toward short maturities), interest rates will be affected. Long-term rates will go down.

"If they tilt the maturity structure to short term, it is a disincentive to inflate. That's policy consistent. Right now, it's not consistent."

If consumers and corporate

Bush plan could add to economy

SCOTT BURNS

Continued from Page 1H.

by $85.9 billion.

Stated in ratios, each $1 in investment income lost in the Clinton plan translates into $61 in workers' wages lost.

Why such a dramatic difference?

Because the Robbinses' economic model is a dynamic model that assumes people change their behavior to respond to economic circumstances — such as tax changes. When capital and labor are taxed more, there is less investment and less labor is offered. There can be much argument about these conclusions because they are from a model, not history.

One such argument comes in a recent report prepared for Rep. Dick Armey, R-Euless, by the minority staff of the Joint Economic Committee. Titled "Putting People out of Work," the Republican minority staff report estimates net first year job losses of 2 million from the Clinton plan. Distribution of the report last week set off a firestorm of political acrimony.

Joint Economic Committee chairman Paul S. Sarbanes, D-Md., characterized the minority report as "political, not analytical."

"Claims made in this document," he said, "are utterly without merit, based on fabrications, biased analyses, incorrect facts and deliberate distortions of the Clinton plan. The main purpose of their document is to camouflage the administration's pathetic record in economic management and its lack of a credible plan of its own to get the economy moving again."

Estimating in the other direction, the president's Council of Economic Advisers forecast that the Bush plan would create 500,000 additional jobs in the first year, nearly 20 *times* the 26,000 employment gain forecast by the Robbinses' model.

What numbers should we believe?

None concerning the future. We can, however, look kindly on those who provide forecasts that have been accurate in the past. It was the Robbins/NCPA model that showed the budget summit deal contained $500 billion more deficit than the much-publicized agreement between the Republican administration and the Democratic Congress six months before Office of Managment and Budget director Dick Darman admitted the size of the error.

What we do know is that tax cuts in the 1980s *did* work in reverse: Dramatic reductions in tax *rates* on personal and investment income caused high-income families to pay far *more* of the federal income tax in 1990 than in 1980. According to the Tax Foundation, a non-partisan Washington-based group that collects figures on federal, state and local taxes, top-income households now carry *more* of the total tax burden than they did in 1980 (see Table 2).

In 1990, according to the Tax Foundation, you were in the top 5 percent of all earners if your income was $80,867; you were in the top 10 percent at $63,818.

The portion of Social Security taxes paid by higher-income earners *also* increased in the 1980s. The Robbinses' estimate from IRS statistics that the top 50 percent of all earners paid 80.3 percent of all Social Security taxes in 1981 and 83 percent in 1988.

While Social Security taxes and federal income taxes can interact to saddle middle-income workers with marginal tax rates higher than the 31 percent rate paid by the well-to-do, it remains that the best way to get the well-off to shoulder more of the tax burden is very simple: Reduce their tax rates.

However modestly, that is what the Bush plan offers.

AT A GLANCE

LOWER TAX RATES MEANT HIGHER TAX COLLECTIONS

TABLE 2. Burden of income tax, in percent.

Income group	1980	1990
Top 5 percent	36.4%	42.9%
Top 10 percent	48.6%	53.9%
Top 25 percent	72.9%	76.3%
Top 50 percent	92.6%	93.8%
Lowest 50 percent	7.4%	6.2%

SOURCE: Tax Foundation

CENTRAL FILES

This videotape was given to Dennis Ross to pass along to Mr. Baker. It is from Rabbi Cunin and details various efforts to retrieve the Lubavticher Library manuscripts from the Russians. We gave a copy to the President's Office, too.

Thanks,

Caron Jackson
11/19/92

George Bush Presidential Library
Transfer Sheet

COLLECTION:

Bush Presidential Records
Office of the Chief of Staff

ACCESSION NUMBER:

1993.0001

FOIA/SYSTEMATIC PROCESSING CASE NUMBER (if app.):

☐ Transferred During Accessioning

☑ Transferred During Processing 2000-0715-F

The following material was transferred to:

☑ **Audiovisual Collection** ☐ **Book Collection** ☐ **Museum Collection** ☐ **Other**

Other (Specify):

DESCRIPTION:

VHS videotape, CHABAD, Ch.1 & 2 Mono English, Russian Footage, Length: 60:00, VHS NTSC DUB
11/11/92 From: Rabbi Cunin and details various efforts to retrieve the Lubavticher Library manuscripts.

When transferring material to the museum collection, complete the following.

Donor:

Donor Org.:

Address:

Telephone:

Book Location:

Row: **Section:** **Shelf:** **Position:**

Map Case Location:

Series:

James Baker Files

Box Number:

Folder Title:

[Public Correspondence, Fall 1992] [3]

OA/ID Number:

06142

Transferred by: Deborah Wheeler **Date of Transfer:** 11/1/2002

Received by: Mary Finch **Date Received:** 11/1/2002

Go to Database Navigator **Go to Accession Register** **Go to Withdrawal Sheet** **Print Record**

12/14/92

The Honorable
James Baker – Chief of Staff
~~The White House~~

NRN

Greetings

~~Dear~~ Mr. Baker:

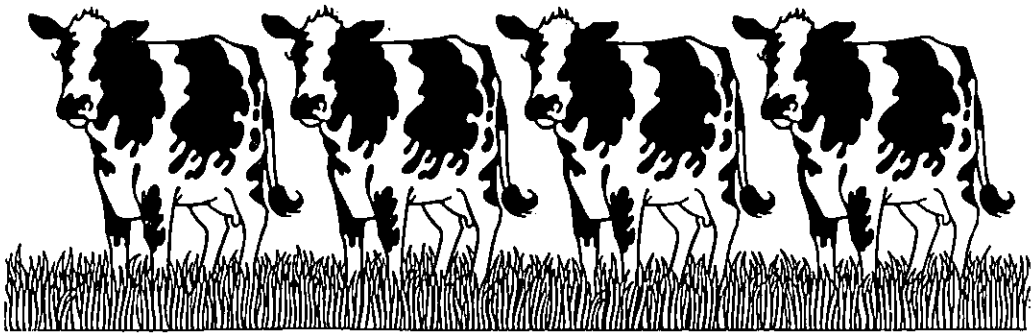
As a life-long Republican – I like many are shocked @ President Bush's loss. I know the media has I believe been very harsh on your handling of the President's Reelection bid – Where were they on your Brilliant performance as the demanding Secretary of State.

Realizing you are indeed extremely busy and certainly respecting your privacy – I would consider it a singular honor if I could receive an official signed White House Christmas Card – to say the least, it would to my family be a significant remembrance of the Bush Administration and a cherished memo for us for many years to come.

Sincerely,

Ralph Benson

Ralph Benson
21 View Drive
Lexington, Virginia 24450



21 VIEW DRIVE
LEXINGTON VIRGINIA 24450

PLEASE MAIL
EARLY FOR
CHRISTMAS

CHO VA 229 12715

White Bengal Tiger

THE HONORABLE
MR. JAMES BAKER
CHIEF OF STAFF TO THE PRESIDENT
C/O THE WHITE HOUSE
1600 PENNSYLVANIA AVENUE
WASHINGTON D.C. 20500

12/17/92 called Kenleys office to thank them for doing this on JAB's behalf.

American Red Cross

During the 1992 holiday season,
a contribution was made on your behalf by the
Management Committee of Enron Corp. for
Red Cross help to the victims of
Hurricane Andrew
in Louisiana and Florida.

This generous gift is deeply appreciated
by both the American Red Cross and
the people we are serving.

The Honorable James A. Baker, III
White House
17th & Pennsylvania Ave., N.W.
Washington, DC 20501

P. O. Box 397
Houston, Texas 77001-0397

Tent City

Homestead, Florida

ENRON CORP.
MANAGEMENT COMMITTEE

Ken Lay

Rich Kinder

Ron Burns

Jim Derrick

Forrest Hoglund

Bob Kelly

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Jack Tompkins

Jack Urquhart

Tom White

In the spirit of giving
during the holiday season
a donation has been made on your behalf
to the American Red Cross
for the victims of Hurricane Andrew in
Louisiana and Florida.

Our very best wishes to you and
your family this holiday season.

ENRON CORP

MANAGEMENT COMMITTEE

NRM

Dear Mr. Baker:

Please tell President Bush, the Words I forgot to write was McCoy.

The Real McCoy

P.S. The Christmas stamps we have are Solar. The Pictures are not real pictures of Mary or the Christ Child. Pictures taken with a Camera are real.

Have a Wonderful Christmas and a Happy New Year and Eternal Life with Jesus Christ in His Kingdom.

Jesus Christ
Loves
You
John 3:16 ¶

Give the Wonderful Gift
of Truth, The King James Version
of The Holy Bible and New Testaments
especially at Christmas Time.
Don't take Christ's name out of
the word Christmas. This New
Testament is pocket size to take
with you to prove true
epistles. Have Jesus Christ
in your daily life

Matthew 16:26

26 For what is a man profited, if he shall gain the whole world, and lose his own soul? or what shall a man give in exchange for his soul?

SEVENTY-FIVE BIBLE REFERENCES ON DRINKING

1. Gen. 9:20-26. The first drunkeness and the attendant immoral behavior.
2. Gen. 19:30-38. Drinking results in Lot's debauchery of his own daughters.
3. Gen. 27:25. Isaac was drinking when he mistakenly blessed Jacob.
4. Lev. 10:9. An express command not to drink.
5. Numb. 6:3. The vow of the Nazarite.
6. Deut. 21:20. Drinking leads to stubbornness, rebellion, and gluttony and brings dishonor to parents.
7. Deut. 29:2-6. Abstinence assures a closer walk with God.
8. Judg. 13:4, 7, 14. Samson's mother, an example of all womanhood, was commanded not to drink. Was alcohol recognized even then as a protoplasmic poison, injuring posterity?
9. I Sam. 1:14-15. Hannah, an example of honored motherhood, was a total abstainer.
10. I Sam. 25:33, 36-38. Nabal, a rich but churlish man who opposed David, died after a drunken spree. He had already lost his wife's respect.
11. II Sam. 11:13. Only by strong drink could David lead Uriah into a fatal trap.
12. II Sam. 13:28-29. Ammon, in a drunken brawl, was murdered by his brother, Absalom.
13. I Kings 16:8-10. While a king was "drinking himself drunk" in his own home, one of his captains conspired against him and slew him.
14. I Kings 20:13-21. Drink and war. While Ben Hadad and thirty-two other Kings were drinking in their pavilions, a small band of Israel's men fell upon the Syrians and put them to flight.
15. Esther 1:5-22. Drink wrecks homes and separates man and wife. At a week's feast of food and wine, King Ahasuerus drunkenly tried to subject his queen to the beastly gaze of inebriated nobles, causing separation of the royal husband and wife.
16. Job 1:18-19. The children of Job were feasting and drinking when blown away in a cyclone.
17. Pr. 4:17. Violence results from drinking.
18. Pr. 20:1. No wise man will indulge.
19. Pr. 21:17; 23:21. Drink leads to poverty.
20. Pr. 23:7-8. The body rebels after drinking.
21. Pr. 23:29-30. Strong drink produces sorrow, contentions, wounds without cause, babblings, redness of eyes.
22. Pr. 23:31. Do not be tempted by intoxicants.
23. Pr. 23:32. God's Word warns that liquor eventually harms all who drink.

24. Pr. 23:33. It fills men's minds with adulterous and impure thoughts.
25. Pr. 22:33. It produces wilfullness and prevents reformation.
26. Pr. 23:34. It brings on insecurity.
27. Pr. 23:35. Insensibility follows drinking, rendering a man into a clod.
28. Pr. 23:35. Habit forming. One drink calls for another.
29. Pr. 31:4-5. Kings and all other rulers or officials with the weight of human lives in their control should not imbibe.
30. Pr. 31:6-7. The only sanction for the use of strong drink was as a medicine or anesthetic for those about to die. We now know better medicines and anesthetics than whiskey, wine, or beer.
31. Eccl. 2:3. The writer of Ecclesiastes tried strong drink, but in the end was forced to admit that it too is vanity. (Eccl. 12:8)
32. Eccl. 10:17. Blessings are promised to the temperate and abstaining nation.
33. Isa. 5:11-12. Woe to the drunkards.
34. Isa. 5:22. More woes to them who drink.
35. Isa. 22:13. Drinking and carnality go together. Leaves men hopeless.
36. Isa. 24:9. Drink is bitter to them that drink it.
37. Isa. 28:1. Woe to the drunkards of Ephraim.
38. Isa. 28:3. The pride of drunkards will be trodden down.
39. Isa. 28:7. Prophets and priests erred through drink.
40. Isa. 28:7. Those who drink are set aside as useless.
41. Isa. 28:7. Prophets and priests finally swallowed up by drink.
42. Isa. 28:7. Drinking brings on spiritual blindness.
43. Isa. 56:9-12. Rebuke to drinking church members, His watchmen.
44. Jer. 35:5, 6, 8, 14. Total abstinence of the Rechabites cited as example of obedience on the part of God's people.
45. Ezek. 44:21. Priests are not to drink wine.
46. Dan. 1:5, 8, 16; 10:3. God honored Daniel because he abstained from the king's wine. Daniel the man was true to the home training he had received as a boy.
47. Dan. 5:1. Belshazzar exhibited as an example of a leader who drank and taught his people to drink.
48. Dan. 5:2, 23. A nation whose women drink.
49. Dan. 5:5-9, 25-28. Ruin and downfall for nations whose rulers and leaders cause them to drink.
50. Dan. 5:3. Belshazzar's sacrilege in using sacred temple vessels for liquor.
51. Hos. 3:1. Part of the degradation of Hosea's wife induced by drink
52. Hos. 4:11. Strong drink and immorality go hand in hand.
53. Hos. 7:5. King and people reproved because of drinking.
54. Joel 1:5. Drunkards to awake from their drinking.
55. Joel 3:3 Young virtue sold for the price of drink.
56. Amos 2:8. Wine of the condemned.

57. Amos 2:12. Pollution of the innocent.
58. Amos 4:1. Dissolute women, oppressors of the poor, call for their liquor.
59. Amos 6:6 Drinkers not concerned about God nor the welfare of others.
60. Nah. 1:10. Drunkards to be destroyed.
61. Hab. 2:5. Arrogance inflamed by drink.
62. Hab. 2:15. Wrong to give one's neighbor drink. Social drinking.
63. Hab. 2:16. Drink leads to shame and humiliation.
64. Matt. 24:48-51. Drunkards warned about the return of Christ and His judgment.
65. Luke 1:15. Greatness of John the Baptist linked with his total abstinence.
66. Luke 12:45. Christ warns against being enmeshed in drink evils.
67. Luke 21:34. Warning against drunkenness and the cares of this life which follow, keeping one occupied to the exclusion of the Spirit.
68. Rom. 13:13. All are admonished to walk honestly, not in rioting and drunkenness. It is not honest to be less than men, created in the image of God.
69. Rom. 14:21. Drinking causes a brother to stumble. Importance of example.
70. 1 Cor. 6:10. No drunkard shall inherit the kingdom of God. (Therefore the preaching of the Gospel must include alcohol education.)
71. 1 Cor. 11:25. The Lord's Supper no place for wine. Word "wine" not even used. Instead all accounts say "the cup" or "fruit of the vine."
72. Gal. 5:21. Revelers in drunkenness shall not inherit the Kingdom of God.
73. Eph. 5:18. Direct command that exhilaration shall be of the Spirit and not by wine.
74. 1 Thess. 5:7. Sobriety enjoined upon the Thessalonians. Children of light must not be overcome by darkness.
75. 1 Tim. 3:3, 8, 11, 12. Church officers must not drink; neither should their families.

Typed copies need to be made and sent out to have Billboard with these lights. Christian Billboards Also Christian Billboards and Advertisements. Christ and State need to come together in the work of all the people. There are already combined because the devil leads people to crime, sin - theft, rape, murder, abortion, drinking of alcoholic beverages, prostitution, murder and etc. We Bohen be a Faithful Christ for the people - Put God first in your life; & love your neighbor much, like a brother. God can help us to love everyone as brothers and sisters.

Our music should be Songs of Praise to Our Father which art in Heaven, Hallowed be Thy Name, Jesus Christ and The Holy Spirit. Also Patriotic music there to help give people faith. Music about the world helps to keep people thoughts on Worldly Things instead of the work for God. Therefore the People

I John 2:15 to 17

George Bush Presidential Library
Transfer Sheet

COLLECTION:

Bush Presidential Records
Office of the Chief of Staff

ACCESSION NUMBER:

1993.0001

☐ Transferred During Accessioning

☑ Transferred During Processing

FOIA/SYSTEMATIC PROCESSING CASE NUMBER (if app.):

2000-0715-F

The following material was transferred to:

☐ **Audiovisual Collection** ☐ **Book Collection** ☑ **Museum Collection** ☐ **Other**

Other (Specify):

DESCRIPTION:

4 1/2" X 3" leather bound New Testament, which includes Psalms and Proverbs. The Bible is in a black gift box.

When transferring material to the museum collection, complete the following.

Donor: Lela Mae Lambert

Donor Org.:

Address: 48 Montrose Drive, Newark, Delaware 19713

Telephone:

Book Location:

Row: **Section:** **Shelf:** **Position:**

Map Case Location:

Series:

James Baker Files

Box Number:

Folder Title:

[Public Correspondence, Fall 1992] [3]

OA/ID Number:

06142

Transferred by: Deborah Wheeler **Date of Transfer:** 11/13/2002

Received by: Amy Day **Date Received:** 11/13/2002

Go to Database Navigator **Go to Accession Register** **Go to Withdrawal Sheet** **Print Record**

NRN

THE HEARST NEWSPAPERS
WASHINGTON HEADQUARTERS
1701 PENNSYLVANIA AVENUE, N. W.
WASHINGTON, D. C. 20006
TELEPHONE (202) 298-6920

NATIONAL EDITOR
SENIOR WASHINGTON REPRESENTATIVE

VICE PRESIDENT AND DIRECTOR
THE HEARST CORPORATION

December 11, 1992

The Honorable James A. Baker III
The Chief of Staff to the President
The White House
Washington, D.C. 20500

Dear Mr. Chief of Staff:

I thought the enclosed copy of Bill Hearst's column for our Sunday papers might interest you.

With best wishes.

Respectfully,

Joseph Kingsbury-Smith

Joseph Kingsbury-Smith

JKS/amr
Enclosure

FROM
49 Montrose Drive
Newark, Delaware
ZIP 19713

NEWARK DEC 15 '92 DEL. 11
U.S. POSTAGE 1.67
PB METER 960538

FIRST CLASS

INSPECTED BY USSS X-RAY

TO Chief of Staff Baker
The White House
1600 Pennsylvania Avenue
Washington ZIP 20500
District of Columbia

750 words
FOR SUNDAY PAPERS, DEC. 13, 1992
(WRH Suggested Head) BUSH DESERVES NOBEL PEACE PRIZE

EDITOR'S REPORT
By William Randolph Hearst, Jr.
Editor-in-Chief, Hearst Newspapers

NORTH SALEM, N.Y. -- President Bush should be nominated for the Nobel Peace Prize for launching the American humanitarian mission to Somalia.

Bush demonstrated great courage in going forward with this mission of mercy. The fact that American intervention in Somalia will save thousands of lives there deserves international recognition, such as the Nobel Peace Prize.

The esteemed award, which is presented every Dec. 10 by the Norwegian Nobel Committee in Oslo, honors people who have made significant contributions to peace and human rights. The American humanitarian mission is dramatic evidence that the world's richest country won't stand by silently when thousands of Somalis are dying from lack of food and medicine.

As you would expect, some European critics of the American humanitarian mission were questioning U.S. motives even as our Marines were landing in that remote country to assure safe delivery of food to Somalia's starving masses long held captive to the whims of well-armed thugs and goons.

These critics are from nations that have done little to alleviate the same human suffering that inspired the American people to come to the rescue. I believe these critics are jealous of our generosity. Their ability to complain is exceeded only by their ability to stand by and do nothing in the face of one of the great tragedies of our time.

This year's deserving Nobel Peace Prize winner, Roberta Menchu, was honored last week for her work on behalf of Indian rights in Guatemala and elsewhere. The prize carried a $973,000 cash award. I believe next year's Nobel Peace Prize should go to George Bush.

Under the rules of the Nobel Peace Prize, nominations must come in the form of a letter from either a member of Congress or ''a professor of political science, history or philosophy.'' Nominations should be sent to:

The Norwegian Nobel Committee
Drannensveien 19
0255 Oslo, Norway.

If he is honored a year from now, Bush would be the first American honored by the Nobel Peace Prize since then-Secretary of State Henry Kissinger received the honor in 1973 for negotiating the end to the Vietnam war.

The Nobel committee honored Kissinger for his action that got American troops out of Vietnam. The Nobel committee should honor President Bush next year because he sent American troops to Somalia, not to conquer that distant impoverished country but to help Somalis.

The U.S. role in Somalia is a dramatic reminder that President-elect Bill Clinton will have the daunting responsibility of leading the new world order. As the world's only superpower following the end of the Cold War, the United States will face unprecedented global challenges in the next four years.

One of those challenges will be to complete the Somalia mercy mission in a way that will enable our troops to leave that country in some semblance of order and self-reliance. That's a tall order, given the history of anarchy, chaos and economic deprivation compounded by

long-term drought. As I said in my column last week, I believe a U.N. trusteeship over Somalia is the best way to provide that kind of help.

Getting U.N. agreement on such a step could prove elusive.

That's one reason the job of secretary of state is so crucial in the incoming administration.

President-elect Clinton, who has given his full support to President Bush's humanitarian initiative in Somalia, is mulling over his choices for secretary of state and is expected to announce his nominee in the next week or so.

The names that keep coming up in speculation include:

*--Warren Christopher, a ranking diplomat in the Carter administration and the director of President-elect Clinton's transition team.

*--Gen. Colin Powell, chairman of the Joint Chiefs of Staff; the Los Angeles Times reported last week that Gen. Powell is under ''increasingly serious consideration'' for the post.

*--Sen. Bill Bradley, D-N.J., who has made a reputation for his mastery of international economics.

*--Rep. Lee Hamilton, D-Ind., the new chairman of the House Foreign Affairs Committee.

All four have had experience in international relations and could do the job. I think President-elect Clinton is right when he says putting pep in the economy is his top priority. But in close competition for top priority is the new administration's need to carefully manage our nation's role in the world at large.

^------<

(ENDsm)

NRN

THE CENTER FOR SECURITY POLICY

Date: 12/15/92

To: HON JAMES BAKER

Company:

Fax Phone Number: 94562883

CC:

From: Center for Security Policy

Subject:

# of Pages (including this cover sheet): 2

Message:

In light of dramatic developments in Russia over the past few days, I thought you might find our analysis of them -- and their implications for U.S. interests -- to be worth a quick review.

Best regards,

Frank

General inquiries concerning the Center and specific name or fax number changes should be directed to extension 268 at the number below.

If you do not receive all pages, please call back immediately.

Voice: (202) 466-0515 Fax: (202) 466-0518

TUESDAY, DECEMBER 15, 1992 / PAGE F3

COMMENTARY

The Washington Times

FRANK GAFFNEY JR.

Grinches back to pilfer reform?

Whatever else might be said about the period between Thanksgiving and early January, 'tis the season for mischief in Moscow. In fact, Soviet communists have frequently observed the holidays by stealing a march on Western nations preoccupied with visions of sugar plums, office parties, and occasionally, with presidential transitions.

For example, Christmastime has, in the past, seen the invasion of Afghanistan (1979), the imposition of martial law in Poland (1980) and the beginning — as part of Mikhail Gorbachev's final hard-line jag — of the crackdown in the Baltic States and other repressive measures (1989). Now, this period is being used to threaten what remains of constitutional democracy, a peaceable foreign policy agenda and free market economic reform in Russia.

Such is the unmistakable portent of the December Congress of People's Deputies. As a result of a series of actions taken by the Yeltsin government in anticipation of the Congress and votes taken in its course, Russia's return to authoritarian centralism at home and aggressive assertiveness overseas is a serious prospect. Consider but a few of these developments:

• The equivalent of billions of dollars have been infused by the Russian Central Bank into thousands of unprofitable state-owned factories and enterprises, primarily in the military-industrial complex, so as to perpetuate their inefficient and undesirable operations. This has set the stage for hyperinflation and destroys a key element of the discipline essential to free market transformation.

• In a further, ominous sop to the old Soviet military-industrial apparatus, the Yeltsin government has embarked upon a massive fire sale of conventional weaponry, nuclear technology and ballistic missiles that threatens to keep Russia's arms industry busy, that would result in frightening proliferation and serious new risks to international security.

• Especially striking given Moscow's economic difficulties — difficulties that have recently caused it to default on payments due on more than $3 billion in U.S. taxpayer-guaranteed loans and to demand urgent rescheduling of its $38 billion in 1993 debt service obligations — has been the Yeltsin government's decision to extend upward of $4.8 billion in supplier credits to China, Iran, Pakistan and Cuba in connection with those nations' purchase of Russian nuclear power reactors.

• When these concessions failed to secure sufficient support from the majority of People's Deputies — whose mandates were obtained during the Gorbachev era, most through vote-rigging and electoral manipulation — President Boris Yeltsin made a momentous decision: If the dominant communist-nationalist-fascist bloc would agree to the appointment as Prime Minister of Yegor Gaidar, the leading force behind what is left of economic reform, Mr. Yeltsin would cede it the power to choose four key Cabinet officers responsible for the foreign affairs and security portfolios.

The response was vintage Soviet: "What's mine is mine; what's yours is negotiable." The Congress' majority pocketed the right to approve the key ministerial appointments and then voted down the Gaidar nomination. Recognizing that he had been had and that further accommodation to the Congress would eviscerate the last vestiges of his political autonomy, Mr. Yeltsin announced he would seek a national referendum on "who is running Russia." The Congress responded by banning any referendum that would curtail its powers.

Over the weekend, however, Mr. Yeltsin reached a new modus vivendi with the Old Guard represented by the purportedly "centrist" Civic Union. Optimists claim that the agreement providing for an April 11 referendum sets the stage for a new, genuinely democratic parliamentary government. A more realistic assessment suggests that the jury is, at best, still out; further Yeltsin concessions could vitiate what remains of his reform program — witness the departure of Mr. Gaidar following the Congress' appointment yesterday of hard-line ex-Soviet energy chief Viktor Chernomyrdin as prime minister.

Either way, the United States and the West have no excuse for persisting in undisciplined, nontransparent aid flows to Russia. If Mr. Yeltsin continues to appease the former Soviet nomenklatura, the policies he will be associated with are not consistent with Western interests. They should not be underwritten by Western taxpayer largess.

On the other hand, if Mr. Yeltsin truly intends to break with the Old Guard and put a real reformist program to a popular referendum, the West has a powerful stake in establishing that progress toward genuine structural transformation along democratic and free market lines has its benefits. Conversely, we have a no less vital interest in demonstrating that continued regression toward unbridled central control of political and economic affairs will not be rewarded.

Accordingly, the Western nations should immediately announce that the rescheduling of former Soviet debt, further Group of Seven bilateral assistance, new loans from the International Monetary Fund, World Bank and European Bank for Reconstruction and Development and other forms of cooperation will not be possible unless and until demonstrable progress is made in the following areas: institutionalization of private property rights; a more disciplined approach to the money supply; a rise in oil prices toward market levels; free national elections for a new Congress; an end to Russian supplier credits for nuclear and other international projects, particularly with respect to China, Iran, Pakistan and Cuba; and the curtailment of weapons proliferation.

Simply put, it would be recklessly irresponsible under present circumstances to permit continued, undisciplined Western aid to flow to Russia. Such aid will simply wind up in the hands of those bent on pursuing at home and abroad policies inconsistent with either domestic prosperity or international peace — something genuinely inconsistent with the holiday spirit.

Frank J. Gaffney Jr. is the director of the Center for Security Policy and a columnist for The Washington Times.

THE HONORABLE JAMES A. BAKER 3d

CHIEF OF STAFF

K Gordon Sandbach
173 East 91st Street
New York, N.Y. 10128
office: (212) 541 8650

NRN

December 15, 1992

The Honorable James A. Baker 3d
Chief of Staff
The White House
Washington, D.C. 20500

Dear Secretary Baker,

With the advent of the 'continuous campaign' by Clinton, the Republicans are going to have to get a lot more active and aggressive (I don't mean nasty) just to stay even.

As you have seen in the material that I have sent down over the last two years, I am certainly one of the people who can help to keep things in line: I know that if we had a quick response team to come up with a smart, aggressive and effective answer to that prosecutor just days before the election, the President would have been re-elected - and you would have been able to continue your work around the globe. He had the momentum. He should have won.

If you or any of your people have any thoughts about where I could help either an individual politician or the Republican Party, I would appreciate hearing about it. I know that I can do some good, and I also know that we have a major challenge ahead of us. I am ready and able to commit myself on a full-time basis.

Sincerely yours,

K. Gordon Sandbach

K. Gordon Sandbach

173 East 91st Street
New York, N.Y. 10128
o: (212)541-8650
h: (212)360-1109

NRN

MARSHALL T. MAYS
Post Office Box 951
Pawleys Island, S.C. 29585
(803) 237-8523*

Nov. 4, 1992

Mr. James A. Baker, III
Chief of Staff
The White House fax 202-456-2883
Washington, D.C.

Two Months of Opportunities

Dear Jim:

You and your team made a valiant effort and we thank you for it. Please consider the feasibility of a new peace effort in the Middle East in conjunction with the President-Elect, and his personal representatives President Carter and Ambassdor Andrew Young.

Invite the Middle East parties to Camp David to meet President Bush and President Carter on November 16. Invite Henry Kissinger as a representative of Presidents Nixon and Ford. You and Warren Christopher can orchestrate the event. Speed and surprise are on your side. This may be an historic opportunity.

Call for three days of prayer, Friday, Saturday, and Sunday, before the meeting, with due respect for President Sadat and his contribution to the peace process.

Israel and Kuwait together could lead a new economic development program for the entire area. The opportunity blows my mind.

Please convey my highest regards to President Bush.

Sincerely,

Marshall

Mr. Baker

A PREFERRED PEACE DIVIDEND

OF HUMAN RESOURCES

December 12, 1992

"Peace Dividend" has come to mean a savings of appropriated tax dollars to be redirected by Congress into non-military social programs. An equally important Peace Dividend is the potential civilian contribution of several million top quality volunteer soldiers, sailors, marines, and airmen with state of the art technical training. What a wonderful resource for helping to create a new world economic order!

Some public school districts (over the objection of N.E.A.) are employing retiring military people as school teachers. Teaching is routine for many officers and non-coms who use the latest teaching aids in their classrooms. As teachers and leaders they inspire their students to excel (helped by the incentive of promotion in rank and pay) and they set an example as role models.

The financial benefits being received by service personnel for early release from the military will be of great assistance to them in making the transition to civilian employment. A degree of financial independence gives them time and choice in selecting new careers. They have overcome through service training and discipline the shortcomings of many public high school graduates.

A real "peace and economic dividend", not yet recognized, will come from Hispanic-American service personnel who can use their Spanish language and culture to the benefit of North American companies expanding their opersations into Mexico under the provisions of the North America Free Trade Agreement (NAFTA). Their language skills and organizational skills will be invaluable in training new local employees in Mexico. They should be effective liason with local government officials, and with a minimum of orientation they can perform administrative and personnel management functions.

The Departments of Defense and Labor should be aware of this "Peace Dividend" and make certain that it is brought to the attention of all personnel who are planning their separation from military service. The Department of Commerce and the U.S. Chamber of Commerce should remind private businesses of this opportunity.

Congress recognizes (as Senator Nunn has pointed out) that the new world order military can provide emergency disaster relief. But Congress should also recognize the role that former military personnel can play in the private economic sector overseas.

MARSHALL T. MAYS
Post Office Box 951
Pawleys Island, S.C. 29585
(803) 237-8523*

Nov. 4, 1992

Mr. James A. Baker, III
Chief of Staff
The White House fax 202-456-2883
Washington, D.C.

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Dear Jim:

You and your team made a valiant effort and we thank you for it. Please consider the feasibility of a new peace effort in the Middle East in conjunction with the President-Elect, and his personal representatives President Carter and Ambassdor Andrew Young.

Invite the Middle East parties to Camp David to meet President Bush and President Carter on November 16. Invite Henry Kissinger as a representative of Presidents Nixon and Ford. You and Warren Christopher can orchestrate the event. Speed and surprise are on your side. This may be an historic Opportunity.

Call for three days of prayer, Friday, Saturday, and Sunday, before the meeting, with due respect for President Sadat and his contribution to the peace process.

Israel and Kuwait together could lead a new economic development program for the entire area. The opportunity blows my mind.

Please convey my highest regards to President Bush.

Sincerely,
Marshall

P.S: Dec. 15, 1992

I urge you to run for the U.S. Senate to replace Lloyd Bentsen and establish an electrive base in Texas for the next national election.

Enclosed is a NAFTA support idea which I have sent to Dick Cheney and others. I hope it will appeal to you and President Bush.

M

WASHINGTON, D.C.

BOB PACKWOOD
OREGON

December 14, 1992

The Honorable James A. Baker, III
The White House
Washington, D.C. 20500

Dear Jim:

Thanks, not only for your note, but for your speech at the prayer breakfast. I read it. It gave me not only comfort but insight. While I particularly enjoyed the spiritual side of it, I also enjoyed your reference to "the people who wouldn't return my phone calls before I went Washington, won't return them after I leave."

It is somewhat similar to the line in the musical "Annie" when the cynical bad guy (whose name escapes me now) says, "You don't have to be nice to the people on the way up if you don't plan to come down." But, of course, you always come down and when you do, it's your true friends who comfort you.

So, Jim, thanks so much. Give my best to Susan.

Sincerely,

Bob

BOB PACKWOOD

NEN

The Administrator
Washington, D.C. 20460

DEC 14 1992

The Honorable James A. Baker
Chief of Staff
The White House
Washington, DC 20500

Dear Jim:

I am enclosing the new EPA publication on our voluntary programs, The Climate is Right for Action. Prompted by our work on voluntary initiatives and the signing of the June 1992 Framework Convention on Climate Change, the book enumerates many opportunities now at hand to act on the nation's commitment to reduce greenhouse gas emissions.

With this publication, I am inviting companies from all industrial sectors and regions of the country to join us in these programs. I hope you find it helpful.

Sincerely yours,

William K. Reilly

United States
Environmental Protection
Agency

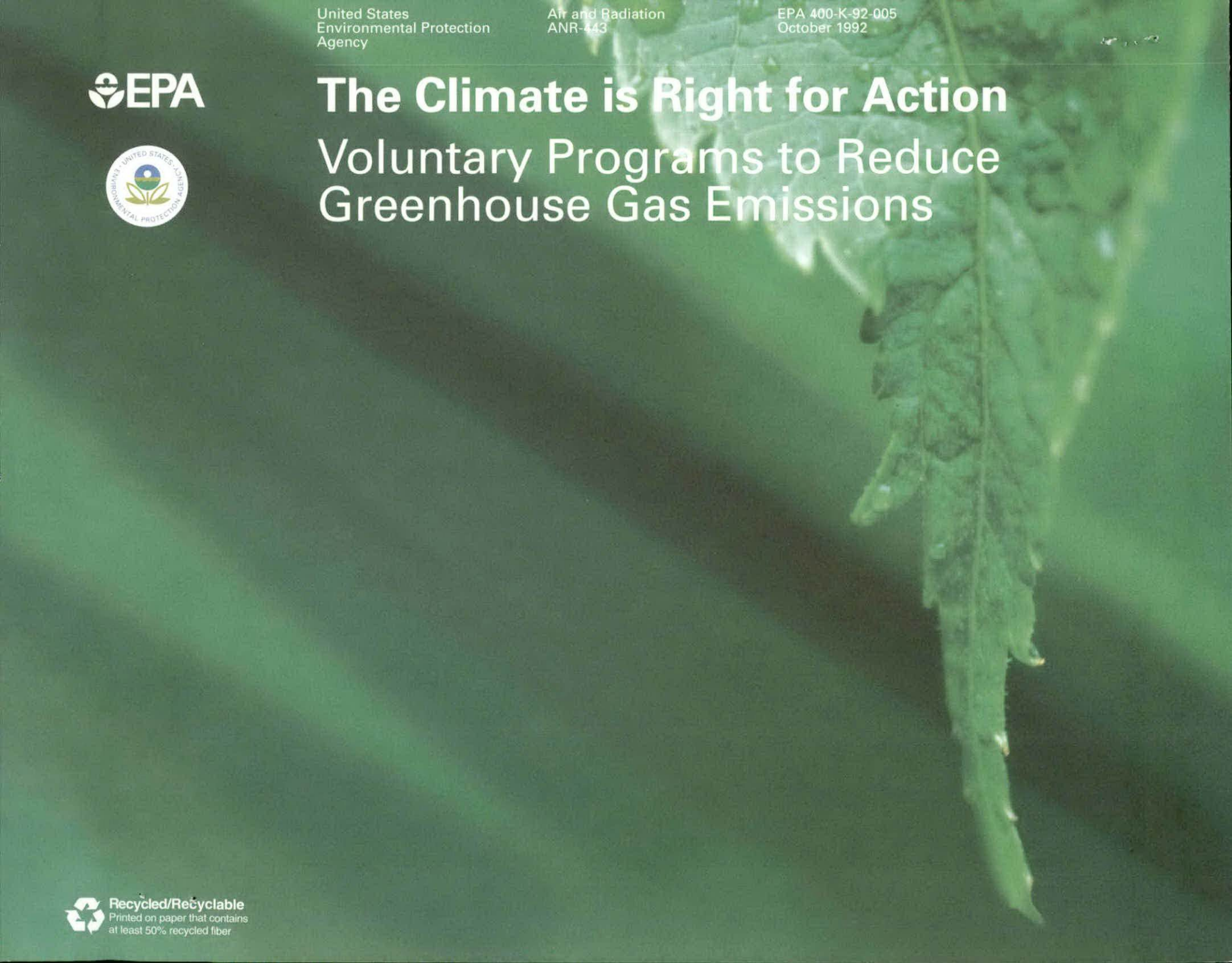
Air and Radiation
ANR-443

EPA 400-K-92-005
October 1992

EPA

The Climate is Right for Action

Voluntary Programs to Reduce Greenhouse Gas Emissions



OFFICE OF AIR AND RADIATION

THE CLIMATE IS RIGHT FOR ACTION

VOLUNTARY PROGRAMS TO REDUCE GREENHOUSE GAS EMISSIONS

As part of its ongoing effort to prevent air pollution, the United States Environmental Protection Agency is expanding its voluntary programs. These programs bring significant benefits in reduction of overall air pollution—and particularly in controlling greenhouse gas emissions. This plan describes the voluntary air pollution prevention programs already underway and provides a blueprint for future action.

In reviewing this blueprint for action, it is important to remember four key items:

1. **Air Pollution Prevention:** EPA's programs described here reduce emissions of greenhouse gases such as carbon dioxide (CO_2) and methane (CH_4), and they also significantly reduce other types of air pollution, including sulfur dioxide (SO_2)—a primary component of acid rain, and nitrogen oxides (NO_X)—a contributor to both acid rain and smog.
2. **Sound Economics:** EPA's voluntary greenhouse programs make sense independent of environmental concerns. The actions described here are good ideas on economic grounds alone. Energy efficiency is indeed "no regrets."
3. **Multiple Efforts:** The voluntary efforts described here are but one component of the Federal government's activity in reducing the risk of climate change. The Department of Energy, Department of Agriculture, and other U.S. agencies have programs underway in this important effort.
4. **Public/Private Partnerships:** Most importantly, the success of EPA's voluntary programs depends upon widespread participation by U.S. companies and citizens. Join EPA in these programs to prevent pollution—***The Climate Is Right!***

"These programs are the cornerstone to limiting greenhouse gas emissions—pairing environmental protection and economic growth."

William K. Reilly, EPA Administrator

Climate Change in Rio

At the **United Nations Conference on Environment and Development** (UNCED) in Rio de Janeiro, Brazil, the U.S. recently joined with 153 nations in signing the *United Nations Framework Convention on Climate Change*, which calls upon each signatory to mitigate climate change by limiting its emissions of greenhouse gases.

The U.S. takes this commitment seriously—in fact, Senate ratification of the climate treaty on October 7th makes the U.S. the first industrialized nation to become a signatory. And the EPA is already translating this commitment into concrete action and measurable results. EPA's greenhouse programs pair the "green" of environmentalism with the "green" of profit to combat air pollution and stimulate economic growth, through the new environmentalism of voluntary corporate action.

EPA's voluntary greenhouse programs consist of a series of initiatives modeled on successful programs already underway, such as **Green Lights** and the utility-sponsored **"Golden Carrot™" Super-Efficient Refrigerator Program**, which EPA helped develop.

EPA envisions a rapid roll-out of these new programs. In fact, in the days following Rio EPA launched its next effort—**Energy Star Computers**—with leading manufacturers who represent ~35 percent of the domestic market for desktop computers.

EPA's voluntary greenhouse programs are highlighted in *U.S. Views on Global Climate Change*, published by the Department of State prior to Rio. Also featured prominently in *U.S. Views* are: full implementation of the National Energy Strategy, which defines a new, more efficient energy path for the United States; the new transportation law which will greatly improve the efficiency of moving people and goods by autos, rapid transit, and other means; and the world's most stringent clean air legislation, which will also contribute to greenhouse emissions reduction. The strategy also emphasizes the role of cooperative action—technical and financial—with developing countries and countries with economies in transition. In Rio the U.S. challenged all countries to develop national action plans and pledged to issue the next publication of the U.S. national action strategy for climate change in January 1993. This U.S. strategy will include EPA's voluntary programs and other efforts.

GREENHOUSE INITIATIVES TIMELINE

Historical Milestones

January 1991:

Launched Green Lights

May 1991:

First Green Lights State Government Partners (California and Maryland)

September 1991:

Consortium for Energy Efficiency (CEE) established and incorporated

January 1992:

Green Lights Partner commitments exceed 2 billion ft^2 of facility space

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

OBJECTIVE

The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

ARTICLE 4: COMMITMENTS

2.(a)Each of these Parties shall **adopt national policies and take corresponding measures** on the mitigation of climate change, **by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs.** These policies and measures will demonstrate that developed countries are **taking the lead in modifying longer-term trends in anthropogenic emissions** consistent with the objective of the Convention, recognizing that the return by the end of the present decade to earlier levels of anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol would contribute to such modification...

(b)In order to promote progress to this end, each of these Parties shall communicate, within six months of the entry into force of the Convention for it and periodically thereafter, and in accordance with Article 12, detailed information on its policies and measures referred to in subparagraph (a) above, as well as on its resulting **projected anthropogenic emissions** by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the period referred to in subparagraph (a), with the aim of returning individually or jointly to their 1990 levels of these anthropogenic emissions of carbon dioxide and other greenhouse gases...

February 1992:

Chlorofluorocarbon (CFC)-free refrigerator with improved energy efficiency developed

March 1992:

EPA/Chinese non-CFC insulated refrigerator prototypes developed

April 1992:

U.S. Views on Global Climate Change published by U.S. State Department

June 1992:

Earth Summit in Rio: *United Nations Framework Convention on Climate Change* signed

June 1992:

Energy Star Computers kick-off—35% of market share participating on 1st day!

EPA's Voluntary Greenhouse Programs— A New Perspective

While scientific uncertainty over the nature of climate change remains, the public is raising other important questions: "What can we do about climate change?" and "How much will it cost?"

The success of programs implemented by EPA suggests not only that significant reductions of greenhouse gases are achievable at low cost—but that they can be profitable! EPA's voluntary greenhouse programs seek to strategically enhance the market. These programs provide mechanisms for improving energy efficiency, which leads to reduced fossil fuel use and lower carbon dioxide emissions, as well as capturing and using methane, a powerful greenhouse gas.

This document describes EPA's voluntary greenhouse programs for industry, state and local governments, and others within the energy and environmental community. The early assistance and involvement of these organizations is essential to the development and continuing success of EPA's greenhouse programs. Public/private partnerships that increase the efficiency with which we use our resources can reduce greenhouse gas emissions and other air pollution, save consumers money, and increase the competitiveness of our businesses.

Voluntary Greenhouse Programs

EPA envisions a rapid rollout of its voluntary greenhouse programs, as illustrated by the timeline beginning on the previous page. Other events supporting the voluntary efforts are included in the timeline as well.


Green Lights

Consortium for Energy Efficiency


Corporate Purchasing


New Technology

Energy Star

Reports


Advisory Committee


Mass Purchases


Regulatory/ Legal Support


Environmental Best Practices

"Golden Carrot™"


International Cooperation

Dates prior to July 1992 are historical; those following the fall of 1992 are subject to significant uncertainty and are included to provide a template for EPA's anticipated actions.

June 1992:

EPA Greenhouse Programs Advisory Sub-Committee selection begins

June 1992:

EPA testifies in Georgia hearing on utility regulatory reform

July 1992:

Utilities commit ~$30 million in "Golden Carrot™" Refrigerator incentives, RFP issued

July 1992:

Brief Ohio Public Utility Commission

July 1992:

U.S.-Russian natural gas meeting in Moscow

Key Elements of EPA's Voluntary Green Programs

1) ***Encourage corporate-wide purchasing*** frameworks so that energy

efficiency and full life cycle cost considerations are incorporated up front. This helps to overcome internal organizational barriers (for example, departments responsible for purchasing equipment would consider energy costs in their decisions—even when their department does not pay the electricity bills).

> *"It takes not much imagination to see that environmental concern is not just a fad, but a serious trend. It will shape the future of our business, and to learn to understand it and shape it is really in our interest."*
>
> Stephan Schmidheiny
> Business Council for Sustainable Development

2) ***Identify energy-efficient products*** so that consumers can make

educated purchasing decisions. Unfortunately, the lack of good information makes it difficult to choose the most cost-effective products.

3) ***Promote mass purchases*** of energy-efficient technologies in order

to improve economies of scale and reduce prices. Once organizations begin to purchase efficient technologies, prices for these products often fall below their less energy-efficient alternatives.

4) ***Encourage industry to commercialize*** more resource-efficient

technologies by demonstrating that these products will sell. Clear "market-pull" signals to manufacturers can help get products off the drawing board and onto store shelves.

August 1992:

Green Lights: over 600 participants

September 1992:

NBC program on Green Lights airs

September 1992:

EPA develops initiative with India for super-efficient, non-CFC refrigerators

September 1992:

EPA/Chinese development of non-CFC Lorenz Cycle refrigerators

September 1992:

New super compressor technology prototype for home refrigerators

5) ***Promote sensible utility regulation and legal frameworks*** to

encourage cost-effective investments in energy conservation and methane-recovery programs. Too often, regulatory barriers prevent potential efficiency investments and increase capital requirements. Ensuring that companies and consumers can indeed profit from wise use of resources—by improving energy efficiency or capturing and using methane for energy—leads to a more productive and less polluting economy.

> *"Innovative green programs such as Green Lights, Energy Star Computers, and the 'Golden Carrot™' Refrigerator Program are critical to achieving national goals for reducing greenhouse gas emissions. Economically sound programs like these are absolutely necessary for achieving the environmental goals of the 1990's."*
>
> Rafe Pomerance, Senior Associate
> World Resources Institute

6) ***Create Environmental Best Practices*** agreements to integrate

environmental considerations into the design and planning of products and services. Placing environmental concerns in a primary role can lead to well-designed products, cost-effective manufacturing processes, and a wiser use of scarce natural resources (for example, capturing leaking methane from a variety of sources and using it for energy).

7) ***Expand international markets*** for resource-efficient U.S.

technologies. EPA, the Department of Energy (DOE) and the Department of Commerce are all working to promote resource- and energy-efficient U.S. technologies worldwide to create additional business opportunities for U.S. industry, while helping protect the global environment. EPA's voluntary greenhouse programs often create such opportunities, many of which are described herein.

September 1992:

EPA manual for chiller refrigerant containment, conservation, and conversion for developing countries

October 1992:

EPA/DOE Memorandum of Understanding (MOU) finalized

October 1992:

Green Buildings—Variable Speed Drives (VSDs) (air handlers) corporate pilot program launched

October 1992:

Energy Star Printers MOU released

October 1992:

EPA promulgates incentive regulations for energy efficiency

EPA Voluntary Green Programs Explained

1. Corporate Purchasing Strategies

Flagship Program: Green Lights

EPA's Green Lights Program is changing the way that companies light their offices and factories across the United States. Lighting accounts for over 20 percent of total U.S. electricity consumption and was responsible for 120 million metric tons of carbon emissions in 1990. Available technology can reduce the electricity used for lighting 50-70 percent. These efficient technologies also provide excellent investment opportunities—in fact, a typical lighting upgrade yields an internal rate of return of 20-30 percent—a payback of about 3-4 years.

Green Lights provides companies and governments with a framework for seizing these efficiency opportunities. Through Green Lights, organizations make a corporate-wide decision to invest in energy-efficient lighting, thus giving individual build-

Green Lights Upgrades Surpass Estimates of Technical Potential

When EPA launched Green Lights in early 1991, published engineering calculations estimated the largest possible lighting electricity savings to be 25-54 percent. Many of the first lighting upgrades completed under Green Lights exceed these estimates of "maximum technical potential."

The Gillette Company	Whirlpool Corporation	Jantzen.
Santa Monica, CA	Lavergne, TN	Vancouver, WA
50,000 ft^2	125,000 ft^2	45,000 ft^2
61% Energy Savings	54% Energy Savings	71% Energy Savings
37% IRR*	72% IRR	36% IRR

*internal rate of return (IRR)
Source: Green Lights Upgrade Reports.

October 1992:

Green Lights has over 3 billion ft^2 committed

November 1992:

CEE executive director hired

November 1992:

Appalachian Coalbed Methane Environmental and Economic Benefits Study released

November 1992:

EPA publishes Conservation Verification Protocol

November 1992:

EPA report on the economic and environmental benefits of natural gas generation released

ing managers nationwide a mandate to pursue the optimal lighting designs.

By signing a partnership agreement with EPA, Green Lights participants commit to survey and upgrade 90 percent of all domestic facilities with the most energy-efficient lighting systems that are profitable, within 5 years of signing the agreement.

As of September 30, 1992, Green Lights participants number 651, including 296 corporate Partners, 24 state and local government Partners, 42 utilities, 195 lighting manufacturers, 55 lighting management companies, and 40 Endorsers. These organizations have committed over 2.8 billion square feet of facility space to the program, over 3 percent of the national total—far exceeding the leasable office space in the metropolitan areas of New York City, Los Angeles, Chicago, San Francisco, Washington DC, Philadelphia, and Dallas.

Green Lights Today & Tomorrow

Estimates include the Green Lights Program as well as other promising DOE and utility programs to promote energy-efficient lighting.

Green Lights Today: 1992	***Green Lights Tomorrow: 2000***
2.8 billion square feet committed	24-60 billion square feet committed
Expected From These Commitments—	***Expected From These Commitments—***
12.4 BkWh/yr Energy Savings	104 - 226 BkWh/yr Energy Savings
2.3 MMT Avoided Carbon Emissions	22 - 55 MMT Avoided Carbon Emissions
67,500 Metric Tons Avoided SO_2 Emissions*	1.3 MMT Avoided SO_2 Emissions*
28,700 Metric Tons Avoided NO_X Emissions	600,000 Metric Tons Avoided NO_X Emissions
$870 Million Reduced Electricity Bills**	$7 - 15.8 Billion Reduced Electricity Bills**

Source: EPA and *U.S. Views on Global Climate Change*, calculated using the following emissions factors: 1992 Carbon = .186 MMT/BkWh; 2000 Carbon = .243 MMT/BkWh; SO_2 = 5.8g/kWh; NO_X = 2.5g/kWh.

* As a result of the Clean Air Act, these reductions may lead to SO_2 allowance credits, worth an estimated $300-1000/ton, rather than actual emissions reductions.

** At 7.0 cents/kWh.

November 1992:

National Association of Regulatory Utility Commissioners endorsement of EPA Energy Star Computers program

November 1992:

Issue final rule reducing landfill methane emissions

November 1992:

Green Lights Partners advertising co-op places ads in major business magazines

November 1992:

Agreement for Energy Star Fax Boards

November 1992:

Launch outreach program on methane energy recovery from landfills to industry/states/municipalities/utilities

Future Corporate Purchasing Programs

Following the flagship Green Lights Program, EPA is planning the introduction of similar programs, targeting the following technical opportunities:

- **Industrial Motors**
- **Buildings Technologies**
- **Commercial Cooking**
- **Better Refrigerants**
- **Industrial Electrolytics**

As technologies evolve and market conditions change, EPA will modify and expand this list.

EPA helps to get the Green Lights job done with technical support from start to finish, including: state-of-the-art software to assist in upgrade decision-making; information on financing energy-efficient lighting through a large national data base; "consumer reports" of lighting products through the National Lighting Product Information Program; and networking through lighting manufacturers, lighting management companies, and utilities. EPA also provides opportunities for public recognition, including public-service advertisements, news articles, marketing materials, broadcast specials, and videotapes.

2. Product Identification Strategies

Flagship Program: Energy Star Computers

The EPA Energy Star Computer program is helping to create a market for energy-efficient desktop computers, by providing a clear market incentive for manufacturers to improve the

"EPA should be congratulated for its creative and inspired solution."

InfoWorld

November 1992:

Mobile Methane Monitor transferred to Russia

November 1992:

Kick-off Federal Green Lights Program

December 1992:

EPA Residential Heating and Cooling Report released

December 1992:

Launch voluntary program on methane emission reductions from natural gas systems

December 1992:

Initiate Animal Waste Demonstration Project

efficiency of their products and an effective mechanism for consumers to make informed purchasing decisions.

Currently, computer systems consume 5 percent of all commercial electricity—and this number could grow to 10 percent by the year 2000. Research suggests that 30-40 percent of all computers are left on at night and over weekends, and that even during the day computers are active less than 20 percent of the time. This provides a clear opportunity for dramatic reductions in energy use, costs, and greenhouse gas emissions.

Manufacturers who sign the EPA Energy Star Computers program agreement will introduce personal computers that automatically "power-down" when they are not being used. This feature was pioneered for use in portable applications, and could cut the energy used by personal computers in half—at no additional cost!

The EPA Energy Star logo will be used to identify machines capable of "powering-down," so that consumers and businesses know that they can save money and cut air pollution when they purchase this equipment.

The EPA Energy Star Computers program was developed with industry leaders and launched June 17, 1992. Current participants in Energy Star Computers make 40 percent of all personal computers and workstations sold in the U.S., and EPA is expanding the program to include other manufacturers. As of September 1992, participating manufacturers include:

- Acer America
- Apple Computer
- Compaq Computer
- Digital Equipment
- EMPaC International
- Hewlett-Packard
- Hyundai Electronics America
- IBM
- NCR
- Silicon Graphics
- Smith Corona
- Zenith Data Systems

December 1992:

Green Lights Residential Program announced

December 1992:

CEE Board of Trustees instated

December 1992:

1,000 Green Lights upgrades underway

December 1992:

1992 EPA/Sweden discuss incorporation of Energy Star Computers guidelines into Swedish strategy

December 1992:

"Golden Carrot™" Refrigerator finalists announced

Future Energy Star Product Identification Programs

Following the flagship Energy Star Computers program, EPA is planning the introduction of similar programs in conjunction with the DOE appliance standards program, targeting the following technical opportunities:

- **Low-flow Showerheads**
- **Residential Room Air Conditioning**
- **Residential Cooking Equipment**
- **Residential Space Conditioning and Shell Improvements**
- **Miscellaneous Residential and Commercial End-Uses**

As technologies evolve and market conditions change, EPA will modify and expand this list.

3. Mass Purchasing Strategies

Flagship Program: Green Buildings—Variable Speed Drives

EPA's Green Buildings initiative will stimulate the market for highly efficient heating, ventilation, air conditioning (HVAC), and water heating technologies. The program's first technology target will be variable speed motor drives for ventilation systems.

Every year, roughly 50,000 air handling motor drives are purchased to move air through buildings and factories. Of these, less than 20 percent have fans capable of operating at variable speeds—that is, adjusting their power based on the needs of the building occupants at any particular time or

Winter 1993:

Voluntary Green Programs Advisory Sub-Committee meets

Winter 1993:

Green Buildings - Ventilation launched

Winter 1993:

Green Industrial Motors launched

Winter 1993:

Energy Star Low-flow Showerhead Program launched

Winter 1993:

Coalbed methane recovery and use case studies

The Exploding Market for Energy Efficiency

Energy efficiency is BIG business. Sales for efficient products targeted by these four flagship greenhouse programs alone are expected to total $53 billion by the end of the decade—comparable to the entire domestic paper producing industry.

Sales of Efficient Products ($ million)

	Historical		Projected	
	1985	1990	1995	2000
Lighting[1]	*	340	2,000	10,000
Personal Computers	*	3,400	25,000	37,000
Variable Speed Motor Drives for Ventilation	*	50	115	400
Refrigerators[2]	*	*	4,200	5,200

* Negligible
[1] Includes only compact fluorescents, T-8 lamps, and electronic ballasts.
[2] Efficient refrigerators are defined to be ≤ 700 kWh/yr, the level of the 1993 DOE standard.
Source: EPA estimates derived from Electric Power Research Institute, International Data Corporation, manufacturers, and Bureau of the Census data.

any particular weather circumstance. Most fans either operate continuously at one speed regardless of building needs or use less efficient mechanical means to control air flow. Furthermore, fans are usually oversized in order to meet demands under the most extreme conditions (i.e. the hottest hour of the hottest day), with an additional margin of safety.

Variable speed drives (VSDs) have been demonstrated in the HVAC marketplace for over 10 years and are capable of reducing electricity consumed for air handling by 40 percent or more. Why is VSD market share so small? According to manufacturers, the answer is simple: first cost. Even though the payback is only 1-3 years, most consumers have been unwilling to make the initially higher investment for the more efficient—and money saving—products.

Winter 1993:

Identify Russian natural gas pilot projects

Winter 1993:

Clean Air Act (CAA) Amendment Utility Energy Savings Evaluation Project begins

Winter 1993:

"Golden Carrot™" Heat Pump launched

Winter 1993:

Green Lease MOU released

Winter 1993:

General Services Administration procurement guidelines for Energy Star Computer products

Through a mass purchase, however, it is possible to reduce the risk to manufacturers to invest more heavily in VSD production. A group buy will signal that VSDs are no longer a "niche product"—that it is time to gear up to larger product lines in order to meet a large and growing demand. This drives down prices—in fact, it is reasonable to believe that large markets enhanced by EPA's Green Buildings program and other utility rebate initiatives will make the first cost of the most efficient products comparable to the first cost of the least efficient ones.

Future Mass Purchasing Programs

Following the flagship VSD mass purchase, EPA is planning the introduction of similar programs, targeting the following technical opportunities:

- **Green Buildings Technologies**
- **Solar Thermal Water Heaters**
- **Amorphous Core Transformers**

As technologies evolve and market conditions change, EPA will modify and expand this list.

4. Strategies to Encourage Commercialization of Resource-Efficient Technologies

Flagship Program: "Golden Carrot™" Super-Efficient Refrigerator Program

Appliance manufacturers often report that it is technically possible to produce more energy-efficient products. From a business standpoint, however, investing in this production has often appeared unwise, since the most efficient products currently on store shelves are not purchased in large quantities. Why invest in the next generation?

The "Golden Carrot™" is why. By aggregating a large pool of appliance rebate money, utilities are giving appliance manufacturers a financial incentive—the most powerful market signal they can send—to make the most energy-efficient appliances possible.

The flagship "Golden Carrot™" appliance is the refrigerator. Refrigerators consume 20 percent of all residential electric-

Winter 1993:

Launch commercial rooftop air conditioning "Golden Carrot™" initiative

Winter 1993:

Launch Animal Waste Outreach Program to states/livestock producers/ rural electric coops

Spring 1993:

VSD for air handlers group buy

Spring 1993:

Amorphous core transformer group buy

Spring 1993:

Launch outreach program on "Nega-allowances"

"This utility consortium deserves high praise for an initiative that is pro-energy efficiency, pro-environment, and pro-economy...It will provide utilities with a low-cost conservation option to help meet growth in electricity demand. It will benefit industry by enhancing the market for innovative technologies and increasing American competitiveness."

William K. Reilly, EPA Administrator, in response to the public announcement of the Super-Efficient Refrigerator Program

ity. On average, refrigerators consume ~1,200 kilowatt hours per year (kWh/yr) of electricity. The best widely-available model on the market now uses ~800 kWh/yr, and the 1993 DOE refrigerator performance standard is ~700 kWh/yr. The "Golden Carrot™" Super-Efficient Refrigerator Program is focusing manufacturer research and development toward energy efficiency in a manner never before seen for refrigerators, and will lead to the introduction of units 25-50 percent more energy-efficient than the 1993 DOE performance standards.

Under the program, which EPA helped develop with utilities and others, utilities have pooled almost $30 million in rebate incentives to the refrigerator manufacturer that can produce the superior product. The manufacturer that can build the largest number of the most efficient, chlorofluorocarbon (CFC)-free refrigerators the quickest and cheapest wins the contract. The environmentally superior product will be available to consumers at a utility-subsidized price beginning in 1994 or 1995. The "Golden Carrot™" Super-Efficient Refrigerator Program will ultimately save consumers $240-480 million in annual electricity payments. This translates into annual electric bill savings of 10 percent to 35 percent for an average household.

Utilities usually create individual, uncoordinated incentive programs with unpredictable life spans. The "Golden Carrot™" coordinates and aggregates utility incentives in a long-term strategy that allows manufacturers to plan ahead. The result is a more rational investment strategy than before, that leads to

Spring 1993:

"Golden Carrot™" Refrigerator prototypes available

Spring 1993:

Launch key state programs in coal mine methane recovery

Summer 1993:

Debut of Energy Star logo on computer equipment

Summer 1993:

"Golden Carrot™" Refrigerator winning manufacturer announced

Summer 1993:

Energy Star logo available for windows, insulation, and other building products

more efficient products at a lower price than would otherwise be the case. Ultimately this translates into healthier corporate bottom lines, lower consumer costs, and significantly reduced carbon dioxide emissions and other air pollution from electricity generation.

Future Programs to Encourage Commercialization of Resource-Efficient Technologies

The Consortium for Energy Efficiency (CEE) has been established by utilities, EPA, and several environmental groups to roll out future "Golden Carrot™" programs for other promising technologies. EPA and utility members are advising CEE staff in new program areas, including:

- **Advanced Heat Pumps**
- **Residential Central Air Conditioning**
- **Clothes Washers**
- **Clothes Dryers**

As technologies evolve and market conditions change, EPA and CEE will modify and expand this list.

5. Regulatory and Legal Support Strategies

Flagship Program: Utility Reform

For too long, utility regulation has encouraged investments in power plants and discouraged investment in efficiency. In fact, utilities and their stockholders have lost money when they conserve electricity. At the same time, ratepayers have been concerned about whether real savings are actually occurring. The result has been an inefficient mix of resources, inflated costs, and unwarranted air pollution.

On the other hand, where utility regulations allow it, utilities often find that it is more cost-effective to invest in energy efficiency than supply. This investment in energy efficiency—or demand-side management (DSM)—complements EPA's voluntary programs and other efforts to increase energy efficiency.

A movement is underway nationwide, supported in the National Energy Strategy (NES), to level the playing field and encourage economically justifiable investments in energy efficiency. The basic premise is that utilities should be able to make as much money on

Summer 1993:

Conservation and Renewables Incentive Allowance Program begins

Summer 1993:

Washer/Dryer "Golden Carrot™" launched

Summer 1993:

EPA/European Community (EC) meeting to discuss Energy Star Computers—Europe

Summer 1993:

Green Buildings - Cooling launched

Fall 1993:

HCFC-free energy-efficient air conditioner prototype developed

energy saved as energy sold when savings are properly verified. This philosophy was formally embraced in the 1990 Clean Air Act (CAA) Amendments. The Act provides incentives for utilities to reduce compliance costs through the use of renewable energy and energy efficiency, where:

The state regulatory authority...has established rates and charges which ensure that the net income of such electric utility after implementation of specific cost-effective energy conservation measures is at least as high as such net income would have been if the energy conservation measures had not been implemented.

> *"We need to reform the rate-making process so that saving energy is more profitable to utilities than selling it."*
>
> Ron Eachus
> Chairman, Oregon Public Utility Commission Chair, Energy Conservation Committee, National Association of Regulatory Utility Commissioners

While EPA recognizes that each state will need to develop its own very specific utility regulations, in general the Agency encourages inclusion of three broad principles:

- Eliminating the incentive to sell electricity by separating (or "decoupling") profits from sales
- Creating an incentive to save electricity—accomplished through programs in which utilities and their stockholders can actually profit from successful investments in conservation
- Verifying energy efficiency measures to ensure that actual energy savings are realized

As of July 1991, at least one dozen states have adopted comprehensive regulatory mechanisms to encourage conservation. EPA will publish final rules on the CAA incentives and guidance on verifying conservation in the fall of 1992. EPA, DOE, and other Federal agencies are working across the U.S. to encourage the implementation of regulations that will benefit ratepayers and stockholders and prevent pollution. These regulatory changes, by encouraging an increase in DSM investment in energy efficiency, will strengthen EPA's voluntary programs.

Fall 1993:

Green Lights has over 1 billion ft^2 of upgrades underway

Fall 1993:

Launch national certification program for architects and lighting consultants

Fall 1993:

"Golden Carrot™" residential central air conditioner program launched

Fall 1993:

Five additional VA mines recovering methane (total = 11)

Winter 1994:

Mass market debut of "Golden Carrot™" rooftop air conditioners

Flagship Program: Methane Recovery at Coal Mines

Methane, a significant greenhouse gas, can be recovered from coal mines and used for energy instead of being wasted and released into the atmosphere. A variety of proven technologies are available to recover and use this waste gas, but prospects are hampered by legal and regulatory barriers. Some of the principal barriers include legal questions about who owns the gas released by coal mining, the unwillingness of utilities and pipelines to buy the electricity or gas produced by these facilities, and the existence of regulatory frameworks that discourage the use of the recovered gas. These barriers can be addressed through legislative actions at the state or Federal level, incentive programs, and outreach to coal mines, operators, utilities, pipeline companies, states, and municipalities.

EPA has been working with the U.S. coal industry to identify the barriers to methane recovery and assist in their removal. The key focus of current activities is the Appalachian region, which has the largest potential for methane recovery and could most benefit from actions to address ownership issues and remove other hurdles. EPA has efforts underway to ensure that the full benefits of methane recovery at coal mines—in terms of environmental protection, employment, and revenues—are recognized by coal mine operators, as well as by states and other Federal agencies.

> *"These voluntary programs exemplify how we can achieve environmental protection, economic growth, and energy security. As such, they represent a new environmentalism that is broader, cleaner, and even profitable."*
>
> William G. Rosenberg
> EPA Assistant Administrator for Air and Radiation

EPA's activities to expand the recovery of methane from coal mines also have a major international component. U.S. companies lead the world in the development of technologies to recover and use methane from coal seams. Thus, there are

Winter 1994:

Energy Star logo debut on residential cooking appliances

Winter 1994:

Energy Star Room Air Conditioner Program launched

Winter 1994:

Green Buildings - Water and Space Heating launched

Winter 1994:

80% of potential for reducing methane from landfills achieved

Spring 1994:

Solar thermal water heater group-buy

many opportunities for U.S. companies to export technologies and develop international joint venture projects. EPA is facilitating such projects through the preparation of resource assessments and investment opportunity analysis, the creation of international technology transfer centers, and the organization of seminars, workshops, and conferences on coalbed methane that showcase the achievements of U.S. companies. EPA plans to continue these efforts in several countries—including the People's Republic of China, Russia, Ukraine, Poland, and the Czech and Slovak Federal Republic. As a result, U.S. coal and gas companies will have additional business opportunities in coalbed methane and methane emissions from the world's coal mines will be reduced.

Future Programs for Regulatory and Legal Support

Following the flagship Utility Regulatory Reform and Coalbed Methane programs, EPA is planning the introduction of similar programs, targeting the following opportunities:

- **Landfill Methane Recovery**
- **Tire Inflation**

As technologies evolve and market conditions change, EPA will modify and expand this list.

6. Environmental Best Practices Strategies

Flagship Program: Green Nylon Manufacturing

The United States produces about one-third of the world's nylon in a manufacturing process that releases the greenhouse gas nitrous oxide (N_2O).

Nitrous oxide emissions can be reduced during the manufacturing process through the addition of a reductive furnace to adipic acid plants, the factories used in the production of nylon. This technology, which recycles nitrous oxide and saves energy and raw materials, is being developed now and is expected to be fully commercialized by mid-decade.

EPA is working with major U.S. nylon manufacturers to expand the use of these reductive furnaces. By incorporating environmental concerns into design and manufacturing processes, EPA and nylon manufacturers are leading the way toward a more environmentally sound—and more competitive—economy.

Spring 1994:

Energy Star logo on most personal computers and printers sold

Spring 1994:

Green Commercial Cooking launched

Summer 1994:

42 State Partners in Green Lights

Summer 1994:

CEE/EC Summit on "Golden Carrot™" opportunities for Europe

Summer 1994:

Launch Energy Star program for large consumer appliances

Future Programs for Environmental Best Practices

Following the flagship Green Nylon Manufacturing program, EPA is planning the introduction of similar programs, targeting the following opportunities:

- **Livestock Waste Lagoon Methane Recovery**
- **Livestock Dietary Strategies**

As technologies evolve and market conditions change, EPA will modify and expand this list.

7. Strategies to Expand International Markets

Flagship Program: Natural Gas Pipelines in Russia

EPA's experience in its voluntary programs often points naturally to international opportunities, many of which are mentioned in this document. For example, EPA's natural gas experience in the U.S. led to an initiative in Russia, the largest natural gas producer in the world. Current estimates suggest that about 5 percent of the gas produced in the former U.S.S.R—approximately 25 Teragrams (Tg) of methane—is released into the atmosphere. EPA and Russian gas specialists are working together to reduce leakage of this greenhouse gas to 2 percent by adopting existing and profitable Western technology and work practices.

EPA and GAZPROM (the Russian Gas Association) have established a working group of experts from both countries and are developing projects to increase the efficiency of the natural gas system in Russia. Projects will be chosen from several areas, including: enhanced field maintenance; upstream refining of gas; leak detection and mapping; pipeline construction and rehabilitation; compressor upgrades; power generation; and improved measurement and control devices. The Russian Natural Gas Pipeline project expects to transfer a mobile methane monitor to Russia in late 1992, and identify pilot projects early in 1993.

The Russian Natural Gas Pipeline project could reduce methane emissions 15 Tg, the equivalent of 90 million metric tons of carbon—while providing additional capital resources for new economic development projects in Russia, and creating further export and investment opportunities for U.S. industry.

Summer 1994:

Expert panel updates CAA Amendment Conservation Verification Protocol

Fall 1994:

EPA helps Brazil produce high-efficiency compressors

Fall 1994:

Green Buildings Partners commit 1 billion ft^2

Winter 1995:

Phase I utilities can earn "reduced utilization" conservation credit

Winter 1995:

Mass market debut of "Golden Carrot™" washer/dryers

The Climate is Right for Action

As we move forward at EPA, it becomes increasingly obvious that environmentalists and business leaders are often pursuing the same goals. Only by incorporating environmental concerns can economies truly prosper; only by taking advantage of economic forces can environmental protection goals be realized. Through the voluntary programs to reduce greenhouse gases, EPA and its private-sector partners seek to do both—by embracing sound, cost-effective pollution reduction opportunities and enhancing natural market forces to save energy, reduce pollution, and mitigate the risk of climate change. In fact, EPA's greenhouse programs, along with other U.S. actions, have the potential to significantly reduce greenhouse gas emissions.

"We came to Rio with an action plan on climate change ...My administration published a detailed program of specific measures that the U.S. was prepared to undertake to address climate change... Let us join in translating the words spoken here into concrete action to protect the planet."

President George Bush
June 12, 1992, Rio de Janeiro, Brazil

Winter 1995:

~1 million homes insulated/heated with Energy Star products

Winter 1995:

Green Gas Partners commit 30% of natural gas transmission and distribution

Winter 1995:

All states remove legal barriers hindering methane recovery at mines

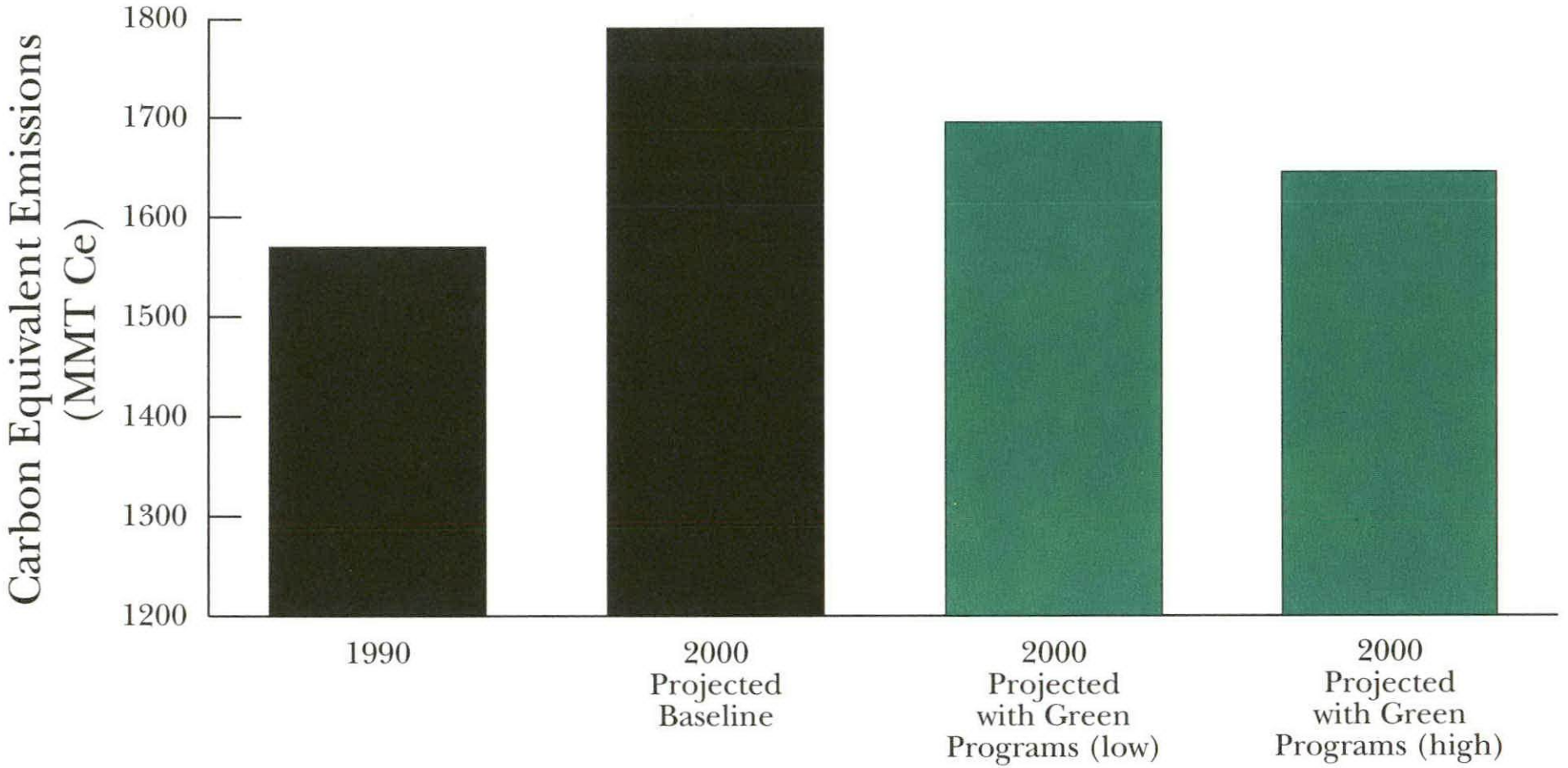
Spring 1995:

EPA Energy Star logo debut on room air conditioners

Spring 1995:

Mass market debut of "Golden Carrot™" heat pumps

Impact of EPA Green Programs on U.S. Greenhouse Gas Emissions



Note: Green Programs benefits calculation includes additional complementary demand side management programs.
These estimates do not include the other parts of the U.S. Action Plan, e.g., the National Energy Strategy, Clean Air Act, Forests for the Future, and others.

Spring 1995:

Mass market debut of "Golden Carrot™" Refrigerators

Spring 1995:

Green Buildings Partners commit 2 billion ft^2

Spring 1995:

Major swine producers recover methane from animal wastes

Spring 1995:

Mass market debut of "Golden Carrot™" heat pumps

Summer 1995:

Chinese market super-efficient non-CFC refrigerator

U.S. Actions to Curb Carbon Dioxide Emissions

U.S. Views on Global Climate Change, Department of State, April 1992

Action/Description	Potential Technical Improvement	Year 2000 Market Penetration	Electric Energy Savings (BkWh)	Year 2000 Carbon Reduction (MMT C)
Demand-Side Management (DSM)/Green Lights				
- Commercial/Industrial	65%	25%-62%	81-203	17.0-50.1
- Residential	75%	27%	23.4	4.9
DSM/Green Computers	57%	65%	26.3	5.5
DSM/Green Industrial Motors	30%	16%	39.5	8.3
DSM/Green Buildings (HVAC)	53%	17%	41.9	8.8
"Golden Carrot™" Refrigerators	57%	3%	3.0	0.6
Residential Clothes Washers	96%	3%	1.3	0.3
Residential Clothes Dryers	65%	3%	1.2	0.3
Low-flow Showerheads	58%	11%	10.2	3.4
Solar Thermal Water Heaters	70%	2%[1]- 3%[2]	4.8	1.4
Advanced Heat Pumps	20%	n/a	1.8	2.5
Appliance Standards	n/a	n/a	22.2	4.7

[1] Homes with gas heaters
[2] Homes with electric heaters

Summer 1995:

Mass market debut of "Golden Carrot™" central air conditioners

Summer 1995:

Energy Star-bearing low-flow showerheads approach 5% penetration

Summer 1995:

Five additional Appalachian mines recovering methane (total 16)

Fall 1995:

Launch Energy Star program for small consumer appliances

Fall 1995:

Green Commercial Cooking - 15 national restaurant chains commit

U.S. Actions to Curb Carbon Dioxide Emissions

U.S. Views on Global Climate Change, Department of State, April 1992 (continued)

Action/Description	Potential Technical Improvement	Year 2000 Market Penetration	Electric Energy Savings (BkWh)	Year 2000 Carbon Reduction (MMT C)
Residential Space Heating				
- New	20%	8%		
- Old	10%	10%	2.4	0.5
Residential Central Air Conditioning	29%	40%	9.6	2.0
Residential Room Air Conditioning	19%	40%	1.2	0.3
Residential Cooking	8%	40%	1.2	0.3
Commercial Cooking	20%	30%	1.8	0.4
Industrial Electrolytics	20%	13%	1.8	0.4
Amorphous Core Transformers	70%	25%	9.0	1.9
Miscellaneous Residential and Commercial End Uses	13%	40%	15.0	3.1
Better Refrigerants	5%	80%	8.2	1.8
Tire Inflation, Auto Inspection and Maintenance, etc.	n/a		n/a	3.0
1991 Transportation Act	n/a	n/a	n/a	4.0
Subtotals: Gross Additional Carbon Actions			**306-429**	**75-108**

[1] Homes with gas heaters
[2] Homes with electric heaters

1996:

India markets super-efficient non-CFC refrigerator

1996:

Green Buildings Partners reach 4 billion ft^2

1996:

Green Lights Partners upgrading 10 billion ft^2

1996:

500,000 solar thermal water heaters installed nationwide

1996:

Utilities installing amorphous core transformers approach 10% of total

Actions to Curb Carbon Dioxide Emissions—Subtotals

	Electric Energy Savings (BkWh)	Year 2000 Carbon Reduction (MMT C)[1]
Gross Additional Carbon Actions	306-429	75-108
Less:		
National Energy Strategy Integrated Resource Planning	-116	-24
Consumer Response to Lower Prices[2]	-38	-8
Additional Carbon Actions (Net of NES and Consumer Response)	152-275	43-76
Plus:		
Actions in President Bush's NES Proposals		
— Efficiency Improvements and Integrated Resource Planning		
— Natural Gas Regulatory Reform		
— Expanded Use of Biofuels		
— R&D for Renewables, Transportation, and Energy Efficiency		
— Provide Framework for Additional Actions (previous pages)	128	45
Total Carbon Reductions	**281-402**	**87-121**
Carbon Sinks		5-9
— "America the Beautiful" and Other Forestry Programs		

[1] Reductions are in millions of metric tons of carbon equivalent in the year 2000. These projections are sensitive to assumptions regarding energy prices, economic growth, and technology penetration over the next decade. Future projections will change as the actions list is updated, as events affecting the energy markets and the economy unfold, and as the effects of current actions are seen.

[2] This value (12% to 20% of the electricity savings) is included as an adjustment for increases in demand for energy services that will result as the introduction of these efficient technologies lower consumer costs. The actual "rebound" effect may vary significantly from this value.

Actions to Curb Methane and Nitrous Oxide Emissions

	Year 2000 Carbon Equivalent Reductions (MMT C)[1]	
Methane	@CH_4 GWP = 11	@CH_4 GWP = 22
Methane Capture/Landfills	19	39
Methane Capture/Livestock Waste Lagoons	3	7
Methane Capture/Coal Mines	0-3	0-6
Livestock Dietary Program	3	6
Total Methane Reduction	25-28	52-58
Nitrous Oxide		
Green Nylon Program	8-12	8-12
Total Other Gases	33-40	60-70
Total Greenhouse Gas Emissions Reductions (Carbon and Other)	**125-170**	**152-200**

[1] Reductions are in millions of metric tons of carbon equivalent in the year 2000. These projections are sensitive to assumptions regarding energy prices, economic growth, and technology penetration over the next decade. Further projections will change as the actions list is updated, as events affecting the energy markets and the economy unfold, and as the effects of current actions are seen.

1997:

Energy-efficient heating, ventillation, air conditioning (HVAC) technologies installations in 5% of nation's space

1997:

50 million Americans cook with improved efficiency products

1998:

Green Motors penetrates 10% U.S. market

1998:

Energy-efficient room air conditioners hit 20% of market

1998:

"Golden Carrot™" heat pumps cut electric bills $70 million

NRW

December 7, 1992

Chief of Staff Mr James Baker
White House
1600 Pennsylvania Ave. N.W.
Washington D.C.
20500

RE: 1-800 8 SOMALIA

Dear Sir,

The above 800 telephone number is assigned to our office.

It is available for sub lease to your office.

Please contact us at 708 655-0752 for pricing details and sublease terms.

Sincerely,

Roger Creaden

6184 Pinewood Court
Clarendon Hills, Illinois
60514

R. Creaden
6184 Pinewood Crt.
Clarendon Hills, Ill

60514

FOX VALLEY, IL 60599
PM
07 DEC
1992

Chief of Staff
Mr James Baker
White House
1600 PennsylvANIA
Washington, D.C.

made and manufactured by
MAXERN RECORDS
a division of
MAXERN PRODUCTIONS, INC.
14104 Forest Ridge Drive
N. Potomac, MD 20878
(301) 738-3879

All songs ASCAP
Artwork & Graphic Design
by **Disc Makers**
Phila., PA

recorded in Maryland at
▲ Bakamoe Sounds Studios
Bethesda
▲ LSP Studios
Annapolis
▲ Bebop Productions
Rockville
produced and mixed
by Marco Delmar

MAXERN RECORDS

4 91043-0005-7 0

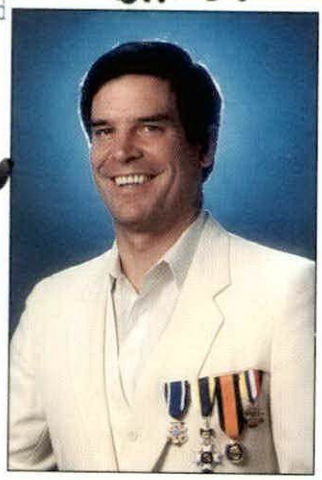
John Langworthy
The Legendary Bard

DREAM SONGS

CHROME
120 µs EQ
AVL91043C

FOR: JAMES BAKER

John Langworthy
The Legendary Bard



DREAM SONGS

Memories, Oh Memories	Living Star
Angel	Shock Wave
White Cadillac	Mister Postman
The Song Bird	No Interest
Let's Party	Promised Land
Stars Up Above	Don't Lie
The Legendary Bard	America's Song

14 Dream Song Originals

CHRISTMAS PARTY

WITH

T.V. JOHN (LANGWORTHY)
&
THE LEGENDARY BAND

Featuring
Sammy & Mike, The Leprechauns

FRIDAY, DECEMBER 18TH
9 PM 'til closing

AT

THE IRISH PIZZA PUB
Montpelier Plaza
12629 Bowie-Laurel Road
Routh 197 at Balt./Wash. Pkwy.
Laurel, MD

Tel. (301) 490-7777

Free Admission

MR. BAKER,
PLEASE HELP ME WITH THIS, OKAY?
J. L.

NRN

MONARCH PRODUCTIONS, INC.
14104 Forest Ridge Drive
Potomac, Maryland 20878

(301) 738-3879
fax (703) 528-1323

JOHN A. LANGWORTHY
President

December 12, 1992

GEORGE HERBERT WALKER BUSH
The President of the United States
White House
Washington, D. C.

PROPOSAL FOR CULTURAL EXCHANGE

Dear Mr. President:

As leader of The Legendary Band, I propose our making a musical tour of the former Iron Curtain this spring, summer and fall. Would you please have the United States government arrange the necessary resources for The Legendary Band's conducting this tour?

Here is a tentative itinerary, starting April 1st through October 18th, 1993. As you can see, the tour begins in Greece and ends in Odessa, Ukraine. My concept is that we travel a day and play the next day. Travel a day and play the next day. Each town's local soccer stadium would readily provide the forum for our performances.

If the United States government be willing to support this good will tour, my "advance man" Vlad Shick needs to be promptly dispatched to Eastern Europe so he can make the proper pre-tour preparations. Vlad is fluent in Russian, and my lead-guitarist Mike Meier is fluent in German. We currently have contacts in Greece, Turkey, Germany, Russia and Ukraine. These contacts would make our living costs very economical, instead of our having to pay tourist rates. Contacts in the other countries, including interpreters, could be easily arranged through our United States diplomatic missions there.

For overland transportation, The Legendary Band would need a vehicle large enough for ten passengers and our equipment. The tour would encompass 101 performances in 101 towns in 202 days. I would conclude each performance with a short, inspirational speech for democracy and the benefits of a free enterprise system. The promise of freedom is that hard work guarantees an individual's prosperity.

"WOW! THAT'S ENTERTAINMENT!"

Mr. President, the United States is being unjustly accused of not doing enough to help the ex-Communist Bloc of Eastern Europe. It is the responsibility of each individual to provide for and to make a living for himself. As the people of the former Soviet Bloc settle into their "winter of despair", The Legendary Band can emerge this spring as a joyful beacon of hope for good will and good fortune throughout their naturally abundant lands! They will someday, soon have cause to celebrate their own Thanksgiving!

Again, would you please help us in putting together this worthwhile musical tour? The Legendary Band plays country and original music as a positive affirmation of the human spirit, but we do not have the necessary resources for taking this international tour at our own expense. We need your help.

Sincerely,

T.V.

Encl.

"LET'S PARTY!"

T.V. JOHN (LANGWORTHY)

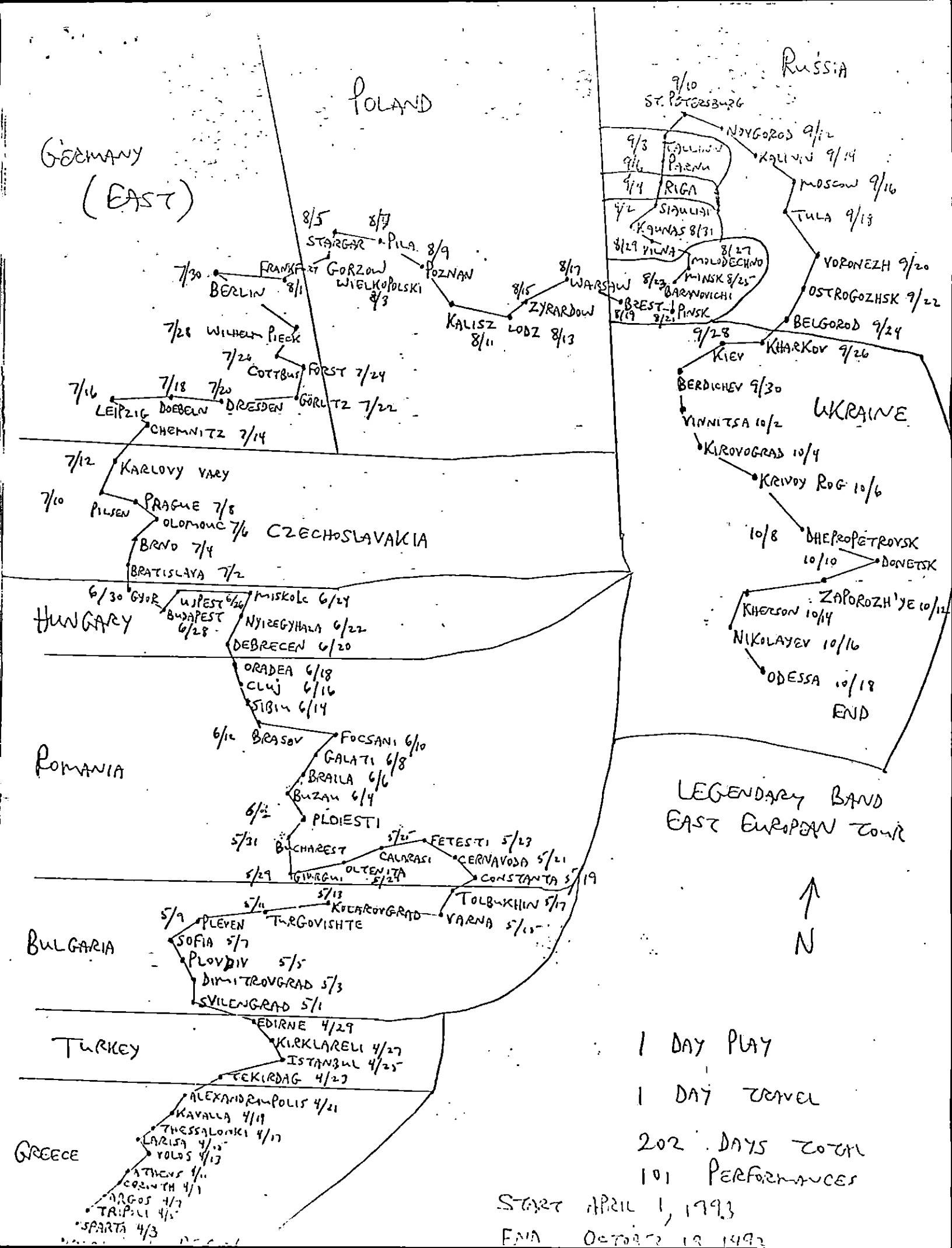
Songwriter / President

Monarch Productions, Inc.
14104 Forest Ridge Drive
Potomac, Maryland 20878

(301) 738-3879

"WOW! THAT'S ENTERTAINMENT!"

"THE LEGENDARY BAND"


GERMANY (EAST)
POLAND
RUSSIA
UKRAINE
CZECHOSLAVAKIA
HUNGARY
ROMANIA
BULGARIA
TURKEY
GREECE
8/5 STARGAR
8/7 PILA 8/9
FRANKFURT 8/1
GORZOW WIELKOPOLSKI 8/3
POZNAN
7/30 BERLIN
8/17 WARSAW
8/15 ZYRARDOW
KALISZ 8/11
LODZ 8/13
7/28 WILHELM PIECK
7/24 COTTBUS
FORST 7/24
7/16 LEIPZIG
7/18 DOEBELN
7/20 DRESDEN
GORLITZ 7/22
CHEMNITZ 7/14
7/12 KARLOVY VARY
7/10 PILSEN
PRAGUE 7/8
OLOMOUC 7/6
BRNO 7/4
BRATISLAVA 7/2
6/30 GYOR
USPEST 6/26
BUDAPEST 6/28
MISKOLC 6/24
NYIREGYHAZA 6/22
DEBRECEN 6/20
ORADEA 6/18
CLUJ 6/16
SIBIU 6/14
6/12 BRASOV
FOCSANI 6/10
GALATI 6/8
BRAILA 6/6
BUZAU 6/4
6/2 PLOIESTI
5/31 BUCHAREST
5/27 CALARASI
FETESTI 5/23
CERNAVODA 5/21
5/29 GIURGIU
OLTENITA 5/25
CONSTANTA 5/19
TOLBUKHIN 5/17
5/9 PLEVEN
5/11
5/13 KOLAROVGRAD
TURGOVISHTE
VARNA 5/15
SOFIA 5/7
PLOVDIV 5/5
DIMITROVGRAD 5/3
SVILENGRAD 5/1
EDIRNE 4/29
KIRKLARELI 4/27
ISTANBUL 4/25
TEKIRDAG 4/23
ALEXANDRUPOLIS 4/21
KAVALLA 4/19
THESSALONIKI 4/17
LARISA 4/15
VOLOS 4/13
ATHENS 4/11
CORINTH 4/9
ARGOS 4/7
TRIPOLI 4/5
SPARTA 4/3
9/10 ST. PETERSBURG
NOVGOROD 9/12
KALININ 9/14
MOSCOW 9/16
TULA 9/18
VORONEZH 9/20
OSTROGOZHSK 9/22
BELGOROD 9/24
KHARKOV 9/26
9/28 KIEV
BERDICHEV 9/30
VINNITSA 10/2
KIROVOGRAD 10/4
KRIVOY ROG 10/6
10/8 DNEPROPETROVSK
DONETSK 10/10
ZAPOROZH'YE 10/12
KHERSON 10/14
NIKOLAYEV 10/16
ODESSA 10/18
END
9/3 TALLINN
9/6 PARNU
9/4 RIGA
9/2 SIAULIAI
KAUNAS 8/31
8/29 VILNA
8/27 MOLODECHNO
MINSK 8/25
8/23 BARANOVICHI
BREST 8/19
8/21 PINSK
LEGENDARY BAND
EAST EUROPEAN TOUR
N
1 DAY PLAY
1 DAY TRAVEL
202 DAYS TOTAL
101 PERFORMANCES
START APRIL 1, 1993
END OCTOBER 19 1993

JOHN LANGWORTHY
14104 Forest Ridge Drive
N. Potomac, Maryland 20878

(301) 738-3879

President
Monarch Productions, Inc.
a professional entertainment company

Songwriter/singer/recording artist
Maxern Records
Dream Songs, an album (1991)
Dream Power, in production

Master of Ceremonies
"The T.V. John Show"
a musical entertainment program
on the Open Channel
(cable television)

Founder and Leader of The Legendary Band

Semi-Finalist with two (2) Honorable Mentions,
Mid-Atlantic Songwriters Contest (1992)

Founder, NATIONAL MUSIC DAY
the last Saturday of every June
designated through federal legislation sponsored by
United States Congresswoman Connie Morella (MD)
First National Music Day: June 2 , 1993

Author/composer
The Dream Man
Warmest Regards
&
Jupiter Jack
musical screenplays (ready for production)

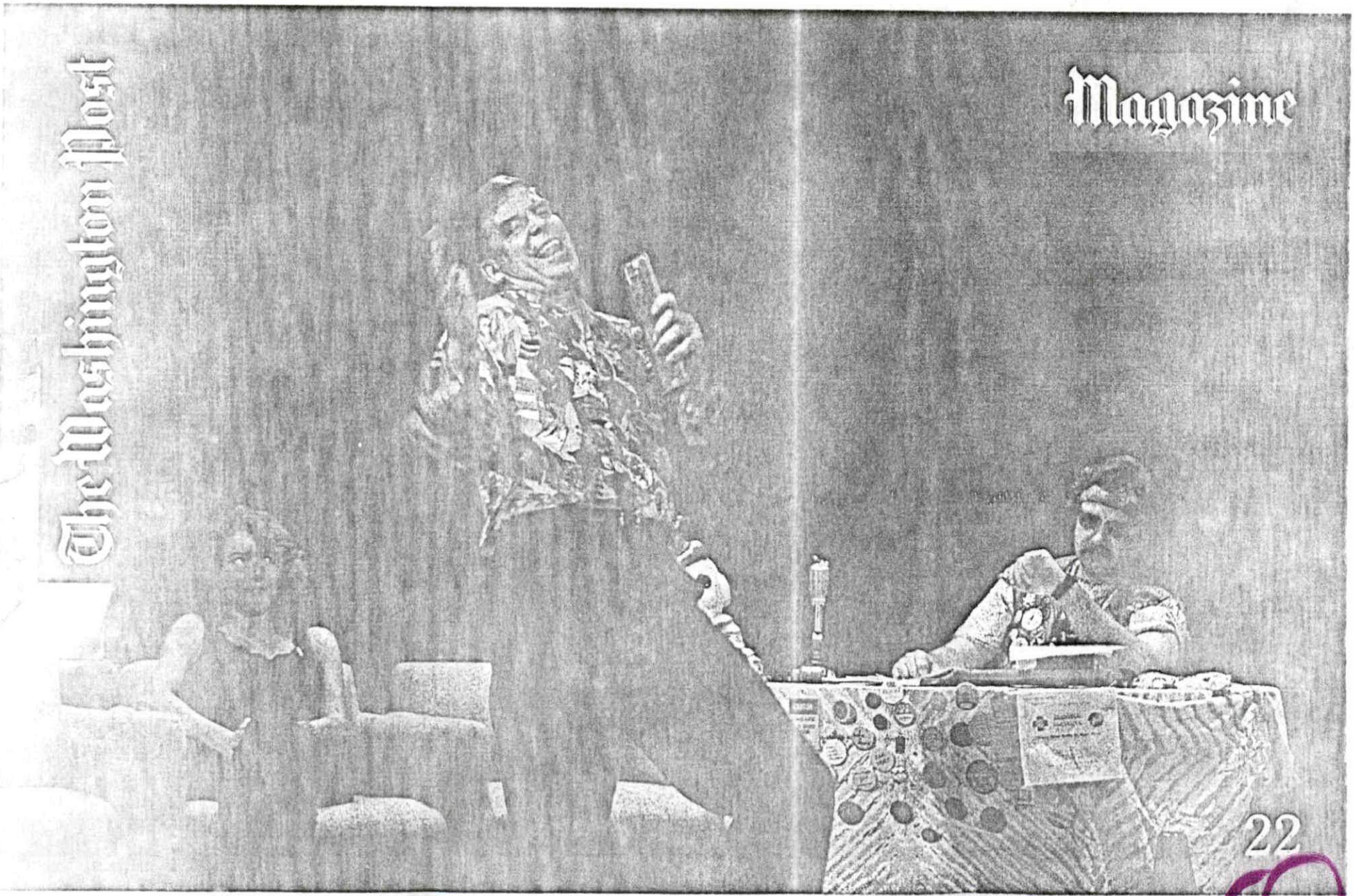
On-going live performances at various clubs
throughout the Washington Metropolitan Area.

Education:
University of Massachusetts, B. A.
American Conservatory Congress (San Francisco),
Full Scholarship in Professional Entertainment

"WOW, THAT'S ENTERTAINMENT!"

The Washington Post

Magazine



Coming at you—live!—from Fairfax County's Channel 10 is "Larz From Mars," starring Larry "Larz" LaComa, right, and tonight's guest, TV John.

T.V. JOHN (LANGWORTHY)

JAMES BAKER
CHIEF OF STAFF
THE WHITE HOUSE, 1600 PENNSYLVANIA AVE., NW.
WASHINGTON, D.C. 20500

VERY IMPORTANT

MEMORANDUM

TO: The Honorable James Baker
Chief of Staff to the President
of the United States

FROM: Senator Ted Stevens
Ranking Republican, Subcommittee on Federal Service,
Committee on Governmental Affairs

DATE: December 10, 1992

RE: Transition

In the past few days, several agencies have expressed concern to me about President-Elect Clinton's transition teams and the manner in which they are interacting with federal agencies.

In some cases, the President-Elect's transition teams have simply showed up with little or no notice, demanding access to ongoing work documents and files. Agency heads are unclear whether these teams are to be given office space, as some have requested, whether they are entitled to use agency fax machines, xerox machines, and other equipment which normally are restricted to government employees, and whether they should be granted carte blanche access to active agency files. This is particularly troublesome in cases in which agencies are working to identify the President Bush's transition priorities and complete work he initiated months if not years ago.

As the Ranking Republican on the Federal Services Subcommittee, I would appreciate knowing whether written instructions have been issued to federal agencies to clarify such issues. If so, I would appreciate your providing me a copy. My fax number is 224-2391. If guidance has not been issued, I urge you to consider doing so.

Have a happy holiday,

Ted

CENTRAL FILES

This was forwarded to Andy Card (in his capacity as head of Transition for this Administration) -- he will respond, so no further tasking needed here.

12/18 regretted by phone — sent letter anyway

Subject	Writer	Created At	Modifier	Last Modified On
MR. JAMES BAKER	sarnaik	Dec 18 16:02	sarnaik	Fri Dec 18 17:36 1992

MR. JAMES BAKER III,
The White House,
Washington DC,
USA.

18th December, 1992.

Dear Mr. Baker,

I'm contacting you on behalf of **"THE WORLD THIS WEEKEND"**, one of BBC Radio's leading news and current affairs programmes, to formally request an interview with you for our next edition, which will be broadcast at 1300 GMT on Sunday December 20th. While we appreciate that you have an extremely busy schedule, we do emphasise that we are extremely keen to include an interview with you in the forthcoming programme.

The particular topic under discussion is the decision by the Israeli Government to expel 400 members of the Islamic fundamentalist movement "HAMAS" from Israel as retaliation for the murder of the border police sergeant Toledano earlier this week. As I write, this saga continues to unfold and doubtless there will have been further developments by the time you read this letter. But rather than focus on specifics, we want to examine how this expulsion has influenced the broader Middle East peace process.

At present, the Rabin government are under fire from European and Arab governments for their action, although the vast majority of Israelis appear to support the move. And the episode has drawn attention to the emergence of HAMAS as a powerful rival to the PLO in winning the allegiance of Palestinians in the Occupied Territories; while it remains to be seen whether the US government will exert strong pressure on Israel to revoke the expulsions.

With President Clinton due to assume office in January, this episode will throw the Middle East firmly to the centre of his foreign policy agenda, and the public in Britain are largely unaware of how he's likely to act on the Israeli-Arab issue. And there's also uncertainty on his exact intentions as regards the Yugoslav crisis, particularly Bosnia.

Given your extensive experience of US government and foreign policy formulation at the highest levels, we feel you'd be in an ideal position to give informed, analytical comment on these issues. **"THE WORLD THIS WEEKEND"** is one of the most respected and popular programmes on either radio or TV in the UK, and sets much of the news agenda for the coming week, by dealing in depth with major world issues. Ideally, we would like to do a pre-recorded interview via our Washington studio, but if this isn't feasible then we could easily record you via a telephone line instead. We'd be grateful if you could contact us as soon as possible. Our phone number is 071-927-4100, and our fax number is 071-636-2840.

Yours faithfully,
RAHUL SARNAIK, PRODUCER, "THE WORLD THIS WEEKEND".

Chico Dairy Company
ALL STAR
Dairy Foods
331 BEECHURST AVENUE
MORGANTOWN, WV 26505
PHONE 304-292-9433
FAX 304-292-5848

NRN

DAIRY MART FOODS

December 14, 1992

Honorable James Baker
Chief of Staff to the
President of the United States
The White House
Washington, D. C. 20027

Dear Mr. Baker:

Irangate would never have happened if Congress would have done what they needed to do, that is, to give assistance to get released Americans held hostage.

I petition you to urge President Bush to pardon every person involved with any arrangements with Iran to get hostages freed, including Casper Weinberger.

The last six or eight presidents, as they went out of office, gave pardons to prisoners who were guilty of much more atrocious acts than helping get hostages back (by whatever means), as well as thousands of other incidents, and I believe these people who are being harassed for doing what they though right should be pardoned.

I petition you to have the President grant these pardons before he leaves office, as I feel the same as James Kilpatrick states in the enclosed article.

With Best of Holiday Greetings to your and your Family, I remain,

Sincerely,

Samuel Chico, Jr., President
Chico Dairy Company

SC:dr

Bush should pardon all involved in Irangate

OPINION

James Kilpatrick
Universal Press Syndicate

At some point within the next few weeks, George Bush should take a fresh look at a part of the Constitution he seldom has occasion to read. It says of a president: "He shall have power to grant reprieves and pardons for offenses against the United States."

So reminded, Bush should grant unconditional pardons to every person ever harassed by Congress and the "independent counsel" over the events that came to be known as Irangate. He ought to begin by pardoning Caspar Weinberger before that devoted public servant is forced to trial in January.

The story goes back to 1985. In an effort to win release of U.S. citizens held hostage, President Ronald Reagan in effect authorized the payment of ransom to Iran. The ransom was to be paid in anti-tank missiles transhipped from Israel. The secret arrangement may have been illegal, but Reagan was determined to worry about hostages first and legalities later.

The rap on Weinberger is that he committed perjury in answering questions, under oath, put to him by the staff of a House committee. He was asked about meetings he had attended at which the deal was discussed. Specifically, he was asked:

Q: Is there any way that you have of making a record of the highlights of meetings of this nature?

A: No. There wasn't.

Q: Do you ever take notes that are not dictated or make jottings when you get back?

A: Yes, occasionally, but comparatively rarely . . . My handwriting is notoriously bad. I have trouble even reading it myself. Occasionally, I take a few notes, but not really very often.

The indictment alleges that Weinberger was an inveterate note-taker. During his seven years as secretary of defense, he took hundreds of pages of notes on his meetings, telephone calls and casual conversations. At one of the Iranian conferences six years ago, Weinberger took 16 pages of notes.

The questions put to Weinberger on this point were clumsily phrased, but their thrust was clear. Weinberger's answers may not have been "false, fictitious and fraudulent" as a matter of law; they may not have shown contempt of Congress beyond a reasonable doubt, but they were certainly less than the whole truth.

Let the point be conceded. The question arises: What useful public purpose could be served by subjecting Cap Weinberger to trial? Prosecution would serve only one purpose, and that is to stroke the vanity of Lawrence Walsh, the independent counsel who has spent $33 million of the taxpayers' money and come up empty.

Walsh's latest stunt was to obtain a fresh indictment of Weinberger on Oct. 30. The grand jury's true bill included the text of a Weinberger note mentioning George Bush as a participant in one of the Iranian meetings. Walsh's gratuitous act, three days before the election, has to be seen as an attempt to undercut the Bush campaign.

Now Walsh has done another ugly thing. He has retained a San Francisco lawyer, James Brosnahan, to serve as special persecutor of Weinberger. Brosnahan is a Democrat activist. He personally gave $500 to the Clinton campaign. His law firm gave another $20,000. This Brosnahan is the same Brosnahan who tried to smear Justice William Rehnquist at his confirmation hearings many years ago.

Pardon Weinberger? Of course, the victims of Walsh's vendetta should be pardoned! The presidential power is used sparingly, but it is by no means unheard of. Franklin Roosevelt granted 2,721 pardons, Harry Truman 1,911, Dwight Eisenhower 1,110, John Kennedy 471, Lyndon Johnson 960.

NRN

GEORGE .F.HEFFERNAN
11820 EDGEWATER DR #120
LAKEWOOD OH 44107-1798
REPUBLICAN NATIONAL COMMITTEE #90045565-91
FIFTY YEARS.
DEC 15,1992

SUBJECT: OFFICE OF PRESIDENT IN 1995

DEAR HON SECRETARY BAKER:

I AM AFRAID THAT THE MAJORITY OF THE AMERCIAN PEOPLE NOW REALIZE AFTER LAST SUNDAYS DEMONSTRATION IN LITTLE ROCK ARK, THAT THEY MAY HAVE A BILL OF GOODS THAT FIASCO CERTAINLY SHOWED THAT PRES BILL CLINTON GAVE THE AVERAGE AMERICAN V VOTER A SNOW JOB.

ACCORDING TO THE WORLD ALAMANAC 1992 STUDY THE SEQUENTENCE OF VOTERS. EVERY TIME WE GET 12 YEARS REPUBLICAN THEN THE DEMOCRATIC PRESIDNET LASTS ONLY FOUR YEARS. I REALLY BELIEVE WITH ALL MY FIFTY YEARS AS PARTY MEMBER THAT YOU SHOULD BE THE NEXT PRESIDENT IN 1995.

MERRY CHRISTMAS AND HAPPY NEW YEARS MAY YOU PLEASE CONSIDER THE OFFICE OF PRESIDENT IN 1995. I HOPE I AM STILL HERE ON EARTH. I SHALL DO EVERYTHING T TO MAKE THAT POSSIBLE.

RESPECTFULLY YOURS
George F Heffernan
GEORGE. F. HEFFERNAN
80 now & weigh 80 (25 years average in my male family

12/4 - To Central Files (Group had to w/draw invite)

Lester M. (Les) Alberthal, Jr.
Chairman of the Board
President and Chief Executive Officer

EDS

December 3, 1992

The Honorable James A. Baker
Chief of Staff
The White House
1600 Pennsylvania Avenue NW
Washington, D. C. 20500

Dear Mr. Baker:

I have the distinguished honor of serving as the Chairman for the 1993 Dallas Ambassadors Forum which will be held April 30 through May 2, 1993. Each year, the city of Dallas hosts ambassadors from all over the world to showcase our business environment and communicate Dallas' cultural and economic assets to the participating countries. This event is supported by all of the major corporations in our area.

All proceeds from the Dallas Ambassadors Forum fund the Dallas Educational Foundation and the Dallas Educational, Inc. and are used to promote Dallas as an international city. Our ability to enhance Dallas' international visibility and provide more information about Dallas to international representatives is more important than ever as our city moves forward as a key participant in the North American Free Trade Agreement and looks to the future for expansion of our economic base.

If your schedule permits, we would like to have you and Mrs. Baker join us as our honored guests for the weekend. We invite you to give our keynote speech on Saturday, May 1, at lunch following the Business Briefing where visiting ambassadors and key business leaders in our community exchange information about economic development between their countries and Dallas. We believe that your views of the global economy would make an excellent topic for the guests and would provide an exciting hallmark for the weekend. The luncheon will be held at the Plano campus of EDS with approximately 700 guests in attendance. Saturday evening, you and Mrs. Baker would be our guests for the Ambassadors International Ball. Naturally, we will be happy to provide transportation by private jet to and from Dallas, as well as an honorarium for your participation.

Steve Bartlett, Mayor of Dallas, and I will be in Washington next Friday visiting with ambassadors and, if your schedule permits, we would like to meet with you. My office will follow-up regarding your availability to meet. This is a very important event for Dallas. We hope you will consider our invitation.

Sincerely,

Les Alberthal

LMAJr/jlb

Electronic Data Systems Corporation
7171 Forest Lane
Dallas, Texas 75230
(214) 490-2100

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TRACKING NUMBER

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2213M 5080336590

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1 Date: 12/4/92

From (Your Name) Please Print: Les Alberthal

Your Phone Number (Very Important): (214-)661-6000

Company: E D S

Department/Floor No.:

Street Address: 7171 FOREST LN

City: DALLAS **State:** TX **ZIP Required:** 7 5 2 3 0

2 **To (Recipient's Name) Please Print:** The Honorable James A. Baker

Recipient's Phone Number (Very Important): ( )

Company: The White House (Chief of Staff)

Department/Floor No.:

Exact Street Address *(We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.)*: 1600 Pennsylvania Avenue NW

City: Washington, D.C. **State:** **ZIP Required:** 20500

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Priority Overnight (Delivery by next business morning†)	Standard Overnight (Delivery by next business afternoon. No Saturday delivery†)
11 ☐ YOUR PACKAGING	51 ☐ YOUR PACKAGING
16 ☐ FEDEX LETTER*	56 ☐ FEDEX LETTER*
12 ☐ FEDEX PAK*	52 ☐ FEDEX PAK*
13 ☐ FEDEX BOX	53 ☐ FEDEX BOX
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	41 ☐ GOVT PACKAGE

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☐
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Emp. No. Date

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☐ Third Party ☐ Chg. To Del. ☐ Chg. To Hold

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City State Zip

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Date/Time Received FedEx Employee Number

Federal Express Use	
Base Charges	
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Total Charges	

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126

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TERMS AND CONDITIONS

DEFINITIONS

On this Airbill, we, our and us refer to Federal Express Corporation, its employees and agents. You and your refer to the sender, its employees and agents.

AGREEMENT TO TERMS

By giving us your package to deliver, you agree to all the terms on this Airbill and in our current Service Guide, which is available on request. If there is a conflict between the current Service Guide and this Airbill, the Service Guide will control. No one is authorized to alter or modify the terms of our Agreement.

RESPONSIBILITY FOR PACKAGING AND COMPLETING AIRBILL

You are responsible for adequately packaging your goods and for properly filling out the Airbill. Omission of the number of packages and weight per package from this Airbill will result in a billing based on our best estimate of the number of packages received from you and an estimated "default" weight per package, as determined and periodically adjusted by us.

AIR TRANSPORTATION TAX INCLUDED

Our basic rate includes a federal tax required by Internal Revenue Code Section 4271 on the air transportation portion of this service.

LIMITATIONS ON OUR LIABILITY AND LIABILITIES NOT ASSUMED

Our liability for loss or damage to your package is limited to your actual damages or $100, whichever is less, unless you pay for and declare a higher authorized value. We do not provide cargo liability insurance, but you may pay an additional charge for each additional $100 of declared value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your package.

In any event we will not be liable for any damages, whether direct, incidental, special or consequential in excess of the declared value of a shipment, whether or not Federal Express had knowledge that such damages might be incurred including, but not limited to, loss of income or profits.

We won't be liable for your acts or omissions, including but not limited to improper or insufficient packing, securing, marking or addressing, or for the acts or omissions of the recipient or anyone else with an interest in the package. Also, we won't be liable, if you or the recipient violates any of the terms of our agreement. We won't be liable for loss of or damage to shipments of prohibited items.

We won't be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, acts of public enemies, war, strikes, civil commotions, or acts or omissions of public authorities (including customs and quarantine officials) with actual or apparent authority.

DECLARED VALUE LIMITS

The highest declared value we allow for FedEx Letter and FedEx Pak shipments is $500. For other shipments, the highest declared value we allow is $25,000 unless your package contains items of "extraordinary value," in which case the highest declared value we allow is $500. Items of "extraordinary value," include artwork, jewelry, furs, precious metals, negotiable instruments, and other items listed in our current Service Guide.

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ALL CLAIMS MUST BE MADE BY YOU IN WRITING. You must notify us of your claim within strict time limits. See current Service Guide.

We'll consider your claim filed if you call and notify our Customer Service Department at 800-238-5355 and notify us in writing as soon as possible.

Within 90 days after you notify us of your claim, you must send us all relevant information about it. We are not obligated to act on any claim until you have paid all transportation charges, and you may not deduct the amount of your claim from those charges.

If the recipient accepts your package without noting any damage on the delivery record, we will assume that the package was delivered in good condition. In order for us to process your claim, you must, to the extent possible, make the original shipping cartons and packing available for inspection.

RIGHT TO INSPECT

We may, at our option, open and inspect your packages prior to or after you give them to us to deliver.

NO C.O.D. SERVICES

NO C.O.D. SERVICES ON THIS AIRBILL. If C.O.D Service is required, please use a Federal Express C.O.D. airbill for this purpose.

RESPONSIBILITY FOR PAYMENT

Even if you give us different payment instructions, you will always be primarily responsible for all delivery costs, as well as any cost we may incur in either returning your package to you or warehousing it pending disposition.

RIGHT OF REJECTION

We reserve the right to reject a shipment at any time, when such shipment would be likely to cause damage or delay to other shipments, equipment or personnel, or if the transportation of which is prohibited by law or is in violation of any rules contained in this Airbill or our current Service Guide.

MONEY-BACK GUARANTEE

In the event of untimely delivery, Federal Express will at your request and with some limitations, refund or credit all transportation charges. See current Service Guide for further information.

Part # 137204/137205
Rev. 2/92

Albenthal

Lester M. (Les) Alberthal, Jr.
Chairman of the Board
President and Chief Executive Officer

EDS

December 3, 1992

The Honorable James A. Baker
Chief of Staff
The White House
1600 Pennsylvania Avenue NW
Washington, D.C. 20500

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Sincerely,

Les Alberthal

LMAJr/jlb

Electronic Data Systems Corporation
7171 Forest Lane
Dallas, Texas 75230
(214) 490-2100

(214) 604.6000

Central Files

Adams C. McHenry, Jr.

December 14, 1992

James A. Baker III
Chief of Staff and
Senior Counselor to the President
The White House
1600 Pennsylvania Avenue N.W.
Washington, D.C. 20220

Dear Jimmy:

Just a note to let you know what a tremendous job you have done serving our great country. The time you have spent working with three outstanding presidents has helped to make America the country it is today. Presidents Ford, Reagan and Bush are three class acts, and it was because of your hard work and determination that helped them achieve the majority of their goals. And most of the time you were fighting a Democratic controlled Congress and Senate!

Whatever you do after January 20, 1993 will be a step down from the political arena. Knowing you, I bet your batteries will be recharged and you will be ready for another challenge.

I know Sandra joins me in sending you our very best wishes.

With warm regards,

Sincerely,

Adams

Adams C. McHenry, Jr.

NRN

Jeff Rosenfeld

211 West Beaver Avenue
Suite 201
State College, PA 16801

(814) 231-2211 Fax (814) 231-1215

December 18, 1992

White House
ATTN: James Baker, Chief of Staff
Washington, DC 20500

RE: BUMPER STICKERS

Dear Mr. Baker:

Please find enclosed complimentary bumper stickers, two of which concern the recent Presidential Election and one of which is for Rush Limbaugh fans, such as President Bush and Vice President Quayle. They are:

1. DON'T BLAME ME, I VOTED FOR BUSH
2. I VOTED FOR CLINTON . . . NOT
3. HONK IF YOU'RE A DITTOHEAD

I know you and your friends will love them as much as I do, and will continue to enjoy them over the next four years! Ideally, they will be on prominent display throughout the country and in Washington DC in time for the Inauguration.

If anyone you know would like one, just send $2 for each bumper sticker desired and a self-addressed, stamped business or #10 legal size envelope (one first class stamp is sufficient postage for up to three bumper stickers) to:

Jeff Rosenfeld
211 West Beaver Avenue, Suite 201
State College, PA 16801

If you are unable or not inclined to inform anyone of the availability of these bumper stickers, then just feel free to enjoy them with your friends as much as I have. In four years they will be more popular than ever when electing the next Republican President!

Very truly yours,

Jeff Rosenfeld

JR/kjp

Enclosures

George Bush Presidential Library
Transfer Sheet

COLLECTION:

Bush Presidential Records
Office of the Chief of Staff

ACCESSION NUMBER:

1993.0001

☐ Transferred During Accessioning

☑ Transferred During Processing

FOIA/SYSTEMATIC PROCESSING CASE NUMBER (if app.):

2000-0715-F

The following material was transferred to:

☐ **Audiovisual Collection** ☐ **Book Collection** ☑ **Museum Collection** ☐ **Other**

Other (Specify):

DESCRIPTION:

3 Bumper Stickers: "Don't Blame Me, I Voted For Bush," "I Voted For Clinton NOT," and "Honk If You're: A Dittohead."

When transferring material to the museum collection, complete the following.

Donor: Jeff Rosenfeld

Donor Org.:

Address: 211 West Beaver Avenue, Suite 201, State College, PA 16801

Telephone: (814)231-2211

Book Location:

Row: **Section:** **Shelf:** **Position:**

Map Case Location:

Series:

James Baker Files

Box Number:

Folder Title:

[Public Correspondence, Fall 1992] [3]

OA/ID Number:

06142

Transferred by: Deborah Wheeler **Date of Transfer:** 11/13/2002

Received by: Amy Day **Date Received:** 11/13/2002

Go to Database Navigator **Go to Accession Register** **Go to Withdrawal Sheet** **Print Record**

Central Files
NRN -
JAB spoke by phone w/Sen. Stevens
12/21/92

United States Senate
COMMITTEE ON APPROPRIATIONS
WASHINGTON, DC 20510-6025

PRIVATE AND CONFIDENTIAL

December 19, 1992

The Honorable James A. Baker III
Chief of Staff
The White House

Dear Jim,

I am being besieged by Alaskans asking questions about a possible January meeting between Russian President Boris Yeltsin and President Bush in Alaska. As you know, the Associated Press quoted Yeltsin on Friday, December 18, saying that Alaska may be the sight of a signing ceremony on the START-2 agreement. "...[P]rovisionally, it will be in Alaska at the start of January," are the comments attributed to Yeltsin.

Jim, Yeltsin's remarks have been given wide play in the Alaska media and countless people have approached me to determine whether such a meeting is even a possibility if agreement on START-2 is reached. I am in Alaska throughout the Holidays -- I don't believe Frank or Don will be up -- and would very much appreciate a "heads-up" if this event is to occur or is even being seriously considered.

I can be reached through my Washington office (224-1027) or my Anchorage district office (907) 271-5915.

With best wishes for you and your family,

Cordially,

Ted

TED STEVENS

C. Files

IPMWHD1 WSH
1-000691I354 12/21/92
ICS IPMIIHD
001 ITS FM WUW KIT847 12-19 1333 EST
ICS IPMWHD1

92 DEC 21 A8:09

KIT847 JTA459 37
USNX CO ILTY 112
JERUSALEM 112/110 19 2027

CHIEF OF STAFF IN THE WHITE HOUSE
WASHINGTON -D.C.

DEAR MR BAKER FROM THE LITTLE TOWN OF BETHLHEM I WISH TO CONVEY TO YOU AND YOUR FAMILY A MERRY CHRISTMAS AND A BLESSED NEW YEAR STOP MR BAKER I WANT YOU TO KNOW THAT OUR PEOPLE DO GREATLY APPRECIATE YOUR UNTYRING EFFORTS AND SUCCESS IN STARTING THE PEACE PROCESS AND YOUR GEUINE INTEREST IN KEEPING ALL THE PARTIES NEGOTIATING TO GETHER THE PEACE TALKS MUST CONTIUNUE WITHOUT INTERRUPTION UNTIL PEACE AGREEMENTS ARE CONCLUDED STOP LET US PRAY AND HOPE THAT BY NEXT CHRISTMAS PEACE WILL BE ACHIEVED STOP WITH WARM PERSONAL REGARDS

MOST SINCERELY YOURS
ELIAS FREIJ MAYOR OF BETLEHEM

NNN

0752 EST

IPMWHD1 WSH

12/18 - MKN regretted
spoke w/ Anna

To celebrate

The Birthday of His Majesty King Birendra Bir Bikram Shah Dev

The Royal Nepalese Ambassador

and Mrs. Yog Prasad Upadhyay

request the pleasure of your company

at a reception

on Tuesday, the fifth of January 1993

at 6:00 - 7:30 pm

R.S.V.P.
667-4550

2730 Thirty-fourth Place, N.W.
Washington, D.C.

ROYAL NEPALESE EMBASSY
2131 LEROY PLACE. NW
WASHINGTON. DC 20008

Hon. & Mrs. James A. Baker III
Chief of Staff
The White House
Washington, DC 20500

POINTS FOR 12/18/92 MEETING w/PALESTINIAN REPS.
F.HUSSEINI, H.ASHRAWI, C.MANSOUR, S.ARIGAT,
D.ROSS, R.HAASS (JAB office)

12/18/92

BAKER MEETING WITH PALESTINIANS

- It's been a year since you sat down at Madrid to launch an historic process of negotiations with Israel. Realize it hasn't been an easy year.

- Current situation in the territories makes your job harder. Hamas is to blame, but the Israelis over-reacted.

DON'T PLAY INTO EXTREMIST'S HANDS

- Don't play into the extremists' hands and dig yourself into a hole by publically saying you won't continue negotiations.

- That's just what Hamas wants and maybe some in Israel too.

- I've said many times that you have the most to gain from this process.

  -- It offers you nothing short of an end to the Israeli occupation, a chance to govern yourselves, and sooner than you think, a chance to negotiate over the ultimate sovereignty of the West Bank and Gaza.

  -- I know you have major concerns over settlements and human rights. But these are symptoms; negotiations with Israel offers you the means to address root cause of your problems.

DON'T DEVALUE EVEN IF NOT ENUF

- Frankly, (and I've always spoken honestly to you), you may not have accomplished what you want, but there's no point in devaluing what's occurred. You've accomplished a great deal:

  -- First, you got a timetable from Israel which is fast track for an ISGA agreement and elections.

  -- Second, Israel has formally agreed to discuss land, water, and human rights. This is unprecedented and now formally a part of the negotiations.

  -- Third, diaspora Palestinians now in all multilateral working groups; experts from diaspora can now be in bilaterals; Israelis are coming round to experts from East Jerusalem.

- Question is not whether the glass is half empty or half full. Question is, how do you keep the glass filling.

  -- You really have had only three rounds of negotiations with an Israeli Prime Minister that's serious; that's only a total of 6 weeks of negotiations.

- So, my advice to you is to work on negotiating a concept of ISGA with Israel. Rabin's willing to move fast so don't get hung up on issue of sovereignty or territoriality at this stage:

OUR ADVICE

  -- (1) Make clear that your need for legislative power in an elected authority doesn't mean the power to legislate unilaterally in a way that can overturn the ISGA agreement.

  -- (2) Consider Israel's model but press Israel to expand and elaborate on powers and responsibilities.

  -- (3) Use Rabin's target of spring elections to press for progress.

  -- (4) Keep in mind that the sooner we get an ISGA, the sooner we get to the final status negotiations. The interlock in the Madrid invitation still exists.

- Finally, let me say a word about US role.

US ROLE

  -- We played a key role in getting parties to sit down at Madrid; and we're prepared -- if the parties support it -- to play the same role with regard to substance.

  -- Can't and won't speak for the next Administration. But logic of situation leads to conclusion that US will play a more active role once the negotiations are truly joined and gaps become bridgeable.

  -- This means that you and Israelis have to do more to identify specific issues and work to narrow gaps so that our role can be effective.

- If a US-PLO dialogue is raised:

PLO DIALOGUE

  -- I see no basis for resumption.

  -- Pursuing it will only distract everyone from the central issues under negotiation.

Withdrawal/Redaction Sheet
(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
01b. Letter	From: P. Carroll Epps, Jr. to Distribution List Re: IRS (2 pp.)	12/12/92	(b)(6)	

Collection:

Record Group: Bush Presidential Records
Office: Chief of Staff to the President, Office of the
Series: Baker, James A. III
Subseries: Public Correspondence Files
WHORM Cat.:
File Location: [Public Correspondence, Fall 1992] [3]

Date Closed: 11/13/2002	**OA/ID Number:** 93018-003
FOIA/SYS Case #: 2000-0715-F	**Appeal Case #:**
Re-review Case #:	**Appeal Disposition:**
P-2/P-5 Review Case #:	**Disposition Date:**
AR Case #:	**MR Case #:**
AR Disposition:	**MR Disposition:**
AR Disposition Date:	**MR Disposition Date:**

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 advice 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.

PRM. Removed as a personal record misfile.

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]
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(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

U.S. SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C. 20416

OFFICE OF THE ADMINISTRATOR

NRN

Honorable James A. Baker, III
Chief of Staff
The White House
Washington, DC 20515

Dear Mr. Baker:

It is my pleasure to forward to you a copy of the 1992 annual report on The State of Small Business.

Since the first edition of The State of Small Business was published in 1982, small businesses have made remarkable contributions to the economy in employment, innovation, and adaptability. This report summarizes some of the key events in this decade of small business growth.

If you have questions about this report, please call the SBA Office of Advocacy at 202/205-6533.

Sincerely,

Pat Saiki

Patricia Saiki
Administrator

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