



PPEC2001

Dc`j]Wg`UbX`h\Y`A Uf_Yh

HYfa`H\fYY`##`&\$&\$

GWcc`cZ<i a Ub]hYg`UbX`@Ub[i U[Yg`##`H\Y`I b]j Yf



7 ci fgY`Cj Yfj]Yk

GhJZZ`7 cbhJWw`8YhU]`g

7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`]m	@cW]h]cb	D\cbY
>Ygg]W]`K \m]r	>"K \m]r4 i bgk "YXi "Ui	VmUddc]b]ra Ybh	Uj U]`UV`Y`j]U Ya U]`	

GW]cc``7 cbhJWw`bZcfa U]h]cb

GW]cc``cZ<i a Ub]h]Yg`UbX`@Jb[i U[Yg

@cW]h]cb. `GW]cc``C Z]W]Z`A cfj Yb`6fck b`6i]X]b[ž`@Yj Y``&ž&),

CdYb]b[`<ci fg.`A cbXUm!`: f]XUmž`- Ua `!`) da

D\cbY. `ž`*%&`-`' ,)`:`%*, %

: Ul. `ž`*%&`-`' ,)` ; , +\$)

9a U]: [\U`4 i bgk "YXi "Ui](#)

7ci fgY'8YHJ]g

7fYX]hDc]bHg '*

Gi a a UfmicZ\hY'7ci fgY

H\Y'Wci fgY'k]'YI Ua]bY'\ck 'dc']h]WU'd\]'cgcd\Yfg'\Uj Y'hci [\hUVci h\hY'a YUb]b['cZ'ZYXca žYei U]hm
UbX'↑ gh]W']b'a Uf_YhgcW]Yh]Yg" "h]g'Wci fgY'žmci 'k]'gh Xmdfca]bYbhfYdfYgYbhU]j Yg'cZ'k c'cZ'hY'a cgh
]a dcfU]bhfUX]h]cbg']b'dc']h]WU'd\]'cgcd\m''VYfU']ga 'UbX'fYdi V']WU]b]ga "'H\Y'Wci fgY'k]']b]fcXi W' mci 'hc
hY'fYdi V']WU]b W]h]W]ga g'cZ'Wca a YfW'Ug'W'ffi d]h]b['cZ]]fhi Y'UbX'YI Ua]bY'fYdi V']WU]b XYVUH]g'UVci h
k \YhYfY'W'bc a]Wdck Yf' [] Yg'f]gY'hc'Xca]bU]h]cb" "h]k]'W'bfUgh]hYgY'k]h']VYfU'Uf[i a YbHg' h\U
a Uf_Yhg'Yb\UbW']bX]]Xi U'ZYXca "'Mci 'k]'YUfb'UVci hd\]'cgcd\]W' i bXYfgh]UbX]b[g'cZ'hY'fY'U]h]cb'cZ
dc']h]W'hc'Y'W'bc a]W]]b'hY'k cf_'cZ'fY'W'bh']VYfU'UbX'fYdi V']WU]b'd\]'cgcd\Yfg'UbX'dc']h]W' h'Ycf]ghg"
:] [i fYg'h\U]h'Y'Wci fgY'a Um]W'j Yf']bW' XY < UbbU\ '5fYbX]ž: f]YXf]W' < UmY_ž'7\UfYg'A]'gž>Uk U\UfU'
BY\fi ž'D\]]d'DYh]ž>"; "'5"'DcW'W'ž>c\ b'F Uk 'gž>i X]h'G_\Ufž'5a UfmU'GYb'UbX'G]a cbY'K Y]"Mci 'k]'
U'gc'YUfb'hc' i bXYfgh]UbX'UbX'X]g]h]b[i]g\''VYfU'UbX'fYdi V']WU]b'Uf[i a YbHg'UVci h'W'bfY'a dcfUfmdc']h]W'
UbX'dc']W']g]i Ygž'k \]W'a Um]bW' XY'Y'W'bc a]W]bYei U]mž'W'fdcfU]h' dck Yfž'fU]U'↑ gh]W'ž'a cXYfb
g'Uj Yfmž'UbX'UVci fYI d'c]h]h]cb"

7ci fgY'@YUfb]b['Ci hWca Yg

%' 7f]h]WU'mX]gW gg'hY'df]bW]dU'W'bfY'a dcfUfmd\]'cgcd\]WU'UddfcUW]Yg'hc'hY'Yj U'i U]h]cb'cZgcW]U'ž
dc']h]WU'UbX'Y'W'bc a]W]bgh]h]h]cbgž']bW' X]b[ž'Vi hbch]a]h]Xž'hc'']VYfU']ga 'UbX'fYdi V']WU]b]ga "
&" 5dd'mi_Ym]XYUg'cZ']VYfU'UbX'fYdi V']WU]b'dc']h]WU'd\]'cgcd\m]hc'W'bfY'a dcfUfma Uf_YhgcW]Yh]Yg"
' " 7f]h]WU'mYj U'i U]h' _Ym]W'bfW'dhg'cZdc']h]WU'd\]'cgcd\m]gi W'Ug'ZYXca žXYa cWU]W'ž'Yei U]mž'
Xca]bU]h]cb'UbX'↑ gh]W'"
(" F YgYUfW' Wca d'YI ']g]i Yg'UbX'W'bfW'dhg'UbX'WYUfmdfYgYbhUf[i a YbHg'UbX'W'bfW' g]cbg']b'Vch'
cfU'UbX'k f]h]b'ž'fa "

HYUW]b['GhfU]h[]Yg'

H\Y'Wci fgY']g']Uj [\h]h]fci [\U'k c'\ci f'Y'W' fY'gYa]bUf'UbX'cbY'\ci f'hi hc]f]U'"H\Y'Y'W' fYg'UbX'hi hc]f]U'g
UfY'ghfi W' fYX'Ufci bX'k YY_'m]fYUX]b[gž'hi hc]f]U'hc]d]W]ž'ž'f'X]gW gg]cb'UbX'gh' XYbhdFyGybhU]h]cbg'"K YY_'m
dfYdUfU]h]cb'VmfYUX]b['hY'gYh]YI hg']g'W'f' W]U'ž'f'gi W'W'ggž' 'dUf]h]W]dU]h]cb']b'hY'Wci fgY'"@Y'W' fYg'UfY
]b]h]fU]W]j Y'dfYgYbhU]h]cbg'cZVUW_[fci bX'UbX'_Ym]W'bfW'dhg']b'hY'W'fY'fYUX]b[gž' ž'f'cf'cf'c[\g

GYY'A ccX'Y'Zc'f'Zi fh\Yf'XYHJ]`g

Hi fb]h]b'gYH]b[. 'H\]g'Ugg][ba Ybh]g'gi Va]mX'h'fci [\ 'Hi fb]h]b'UbX'ghi XYbhg'WJb'gYY'Hi fb]h]b'g)a]'Uf]m fYdcfg"

5ggYgga Ybh' . '@cb['9ggUm

GhUfhXUH' . 'Bch5dd`]WV`Y

@Yb[h. ' ') \$\$

8YHJ]`g.

Gh XYbhg'dfYdUFY'UbX'k f]h'fYgYUfW'YggUmicZ') \$\$'k cfXg'cb'hcd]Wj'dfcj]YX'Vm'hY'7 cbj Ybcf''H\YgY k]'fY'UH'hc'hcd]Wj'Vzj YfYX'jb'k YY_g' ('hc'%"

K f]mYb'ZYXVUW_k]'VY'dfcj]YX'jb'hY'Zc'fa 'cZV'a a Ybhg'UbX'fi Vf]W

5XX]h]cbU'XYHJ]`g.

GYY'A ccX'Y

Hi fb]h]b'gYH]b[. 'H\]g'Ugg][ba Ybh]g'gi Va]mX'h'fci [\ 'Hi fb]h]b'UbX'ghi XYbhg'WJb'gYY'Hi fb]h]b'g)a]'Uf]m fYdcfg"

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

D`YUgY`gYY`A ccX`Y`Zcf`hY`Wci fgY`fYUX]b[g

F YWca a YbXYX`F Ygci fWg

D`YUgY`gYY`A ccX`Y`Zcf`fYWca a YbXYX`fYgci fWg

7ci fgY`9j U`i Uh]cb`UbX`8Yj Y`cda Ybh

Gh XYb]k]`Uj Y`hY`cddcfh b]m]c`dfcj]XY`ZYXVUW`cb`hY`Wci fgY`]bZcfa U`mZ`UbX`Zcfa U`m]h]ci [\`hY`
A m]9I dYf]YbW`gi fj Ym`H\]g`ZYXVUW`k]`VY`UbU`ngYX`Vmi`hY`Wcj Ybcf`UbX`i gYX`fc`]a dfcj Y`hY`gh XYbh

5 WUXYa]W< cbYgmiUbX`D`U[]Uf]ga

- i bXYfghUjX'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wc'dmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'UjX'5W'W'dhUV'Y'I gY'cZ
I BGK '⇒H'F'Ygci f'W'g'Dc`]W'h
- VY'Uk UfY'cZ'Y'ghUjX'UfX'g'cZVY\Uj]ci f'YI dY'W'X'cZYj Yfmc'bY'j]b'h'Y'I BGK 'W'a a i b]m
- `cW'U'Y'gY'fj]W'g'UbX'j]bZ'c'fa U]cb'UVci hi BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZ'Y'gY'UfY'Ug'k]`VY'ZJa]]Uf'hc'mci ž'c'h'Y'fg'k]`VY'bYk "; U]b]b['U'gc`X'i bXYfghUjX]b['cZU`'h'Y
fY'U'Y'X'UgdY'W'g'cZ9@G9'k]`'Y'd'mci 'a U_Y'h'Y'a cgh'cZ'mci f'gh X]Yg'Uhl BGK ""
[\h'hd.##j\] V'Y'W'f\[i \]X'Y'g"\]V'f'U'f'm'i b'gk "Y'X'i "U'i #'`\]g'Y'#U'V'c'i h'Y`\]g'Y](#)

5 WUXYa]W=Zcfa Uh]cb

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`tc.

- fYei Ygth]Zc`f`Yl H`bg]cb/
- `Uh`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/