



SOCW2008

7 i `h fYž ðXYbh]miUbX'8]j Yfg]m

HYfa `CbY`#`&\$&%

GWcc`cZGcWU`GWYbWg`#`I BGK `5ffg`UbX`GcWU`GWYbWg



7 ci fgY`Cj Yfj]Yk

GhJZ`7cbhJW`8YhJ]`g

7cbj Ybcfg

B Ua Y	9a U]	5j U]`UV]`]m	@cW]h]cb	D\cbY
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d\cbY. \$&`- ' ,) `% \$+

7ci fgY'8YHJ]`g

7fYX]hDc]bqg`*`

Gi a a UfmcZh\Y'7ci fgY

h`h]g`Vci fgYžmci`k]`YUfb`UVci hVcfY`UgdYWg`cZgcWU`k cf_]b`U`X]j YfgY`gcWYm`Mci`k]`YI Ua`]bY
V]c`c[]WždgmWc`c[]WžgcWU`žUbX`W`h`fU`X]a Ybg]cbg`cZ\i a Ub`]j Yg/gfi Xm\ck`]XYbh]hYg`UfY
Vcbgf`i WYX`UbX`i h]gYX`]b`i a Ub`]bYfUW]cbg/UbX`YI d`cfY`j Uf]ci g`k Umj`]b`k` \]W`gcWU`V]UgYgždck Yfž

5ggYgga Ybh

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GY`ZfYZYW]cb`YggUm	&)	H65	%ž`&ž'
; fci d`dfYgYbHU]cb`	&)	H65	(ž)
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@Yb[h. `%\$\$\$

8YHU]`g.

%%\$\$`k cfx`YggUm`H\]g`UggYgga Ybh]g`hc`dfcj]XY`gh XYbhg`k]h`Ub`cddcfh b]mhc`fYZYW]cb`cbYgY`Z
Gh XYbhg`k]`VY`[]j Yb`gdYW]ZWei Yghcbg`UVci hcbY`g`YI dYf]YbW]g`cZX]j Yfg]mž`]XYbh]mž`UbX`i bZ]f
fYUha Ybhg`YhW`Gh XYbhg`k]`fYW]j Y`k f]hYb`ZYXVUW`_UbX`U`bi a Yf]W`[fUXY`k]h.]b`hYb`k cf_]b[`XUm]cZ
gi Va]gg]cb`h`fci [\ `h`Y`I b]j Yfg]mž`@YUfb]b[`A UbU[Ya YbhGmg]h`a `f@A GŁ`H\Y`ZYXVUW`_g\YYhfi Vf]Wk]`
VY`Uj U]UV`Y`hc`gh XYbhg`Uh`h`Y`ghUfhcZ`h`Y`Vci fgY`gc`h`Uh`h`Ym]Wb`k cf`_`hc`k UfXg`gdYW]ZYX`ghUbXUfXg

Hi fb]h]b`gYH]b[. `H\]g`Ugg][ba Ybh]g`gi Va]hYX`h`fci [\ `Hi fb]h]b`UbX`gh XYbhg`WUb`gYY`Hi fb]h]b`ga]`Uf]m
fYdcfng"

5ggYgga Ybh&.`; fci d`dfYgYbHU]cb

GHUfhXUH. `Bch5dd`WUV`Y

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8YHU]`g.

H\]g`UggYgga Ybhdfcj]XYg`gh XYbhg`k]h`cddcfh b]h]Yg`hc`Udd`mi`h`Y]f`YUfb]b[]b`h`g`Vci fgY`hc`h`Y
XYj`Y`cda YbhczUb`UW]cb`dfc`YWh`UbX`]a`dfcj Y`h`Y]f`g`_`g`]b[]fci d`k`cf`_`UbX`j YfVU`Wta`a`i`b]W]h]cb`"H\Y
dfc`YWh`WUb`VY`UVci`h`Ubma`cW`_UW]cb`hc`UXXfYgg`U`dfcV`Ya`]XYbh]ZYX`]b`fY`Uh]cb`hc`X]j Yfg]mž`
DfYgYbHU]cbg`k]`VY`%`a`]bi`hYg`cb[`UbX`gh XYbhg`k]`VY`[]j Yb`U`[fci d`a`Uf`_`K`f]hYb`ZYXVUW`_k]`VY`
dfcj]XYX`]b`WUggž`UbX`h`Y`ZYXVUW`_g\YYhfi Vf]Wk]`VY`Uj U]UV`Y`hc`gh XYbhg`Uh`h`Y`ghUfhcZ`h`Y`Vci fgY`gc`
h`Uh`h`Ym]Wb`k cf`_`hc`k UfXg`gdYW]ZYX`ghUbXUfXg"

Hi fb]h]b`gYH]b[. `H\]g`]g`bchU`Hi fb]h]b`Ugg][ba Ybh

5ggYgga Ybh' . :]bU`YggUm

GhUfhXUHY. 'Bch5dd`]WUV`Y

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

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&\$\$\$`k cFX`YggUm`H\]g`Ugg][ba Ybh]g`hc`Y`d`gh`XYbhg`Yb\UbVW`h`Y]f`i`bXYfgtUbX]b[`cZWcbVWdHg`UbX`h`Ycf]Yg`YUfbYX`UbX`hc`]bXYdYbXYbhmfYgYUfVW`UbX`Yb[U[Y`k`]h`h`Y`YggUmhc`d]W]b`Ub`UbU`m]W]`a`UbbYF"



F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

H\Y`XYhU]YX`fYUX]b[``]gh]g`Uj U]UV`Y`cb`A`ccX`Y`

F YWca a YbXYX`F Ygci fWg

8ca]bY``ž`@`f&\$%+Ł`5bh]!fUW]ghgcW]U`k`cf_`"A`UW`]`Ub`ϕhYfbU]cbU`<`][` \Yf`9Xi` W]h]cb`
5XUa`gžA`"ž`6`i`a`YbZ`XžK`"``>`ž`7`UghUbYXUžF`"ž`<`UW`a`Ubž`<`"K`"ž`DYHfgžA`"``@`ž/` `Ni`b][`Už`L`"``fθ`Xg`"Ł`
f&\$\$Ł`"F`YUX]b[`g`ž`c`f`X]j`Yfg]m]UbX`gcW]U`↑`gh]W`"Dgm]W`c`c`[`m]DfYgg`
5XUa`gžA`"ž/` `6Y`ž`@` `5`"fθ`Xg`"Ł`"f&\$\$*`Ł`"HYUW]b[` `ž`c`f`X]j`Yfg]m]UbX`gcW]U`↑`gh]W`"F`ci`hYX[`Y`
<`i`[`a`Ubž`F`"``f&\$\$&Ł`"7`i` `h`fYž`j`U`i`Yg`UbX`Yh]Wg`]b`gcW]U`k`cf_` `9a`VfUW]b[` `X]j`Yfg]m] `F`ci`hYX[`Y`

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

Gh`XYbhYj`U`i`U]h]`Y`ZYXVUW`_]g`[`U]h`YfYX`dYf]cX]W]`mi`g]b[`ž`Ua`cb[` `c]h`Yf`a`YUbgž]`BGK`ř]A`mθ]dYf]YbW`
dfcW]gg`"``ϕ`ž`c`f`a`U`ZYXVUW`_`UbX`WUgg]!`YbYfU]hYX`ZYXVUW`_`UfY`U`gc`]a`dcf]Ub]h`Gh`XYbhZYXVUW`_]g`hU`Yb`
gYf]ci`g`nž`UbX`Wc]bh]bi`U`]a`dfc]`Ya`Ybh]g`UfY`a`UXY`h`c`h`Y`Wc]i`fgY`VUgYX`]b`dUf]cb`gi`W`ZYXVUW`_`
G][`b]ž]W]Ub]h]W]Ub[`Yg`h`c`h`Y`Wc]i`fgY`k`]`VY`Wc]a`a`i`b]W]hYX`h`c`gi`VgYei`YbhWc`\cf]g`cZgh`XYbh]g`hU`_]b[` `h`Y`
Wc]i`fgY`

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

Hi fb]h]b 'Gi Va]gg]cb

Ʒmci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UH'Ya dh]b['hc'gi Va]hmc i f'Ugg][ba YbhiH'fci [\ 'Hi fb]h]bž'd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'-',) " ' ' %cf'Ya U] 'h'Ya 'cb'YI HYfbU'HY'hgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY', .\$\$Ua '—%\$.\$\$da 'cb'k YY_XUmg'UbX'-. \$\$Ua '—) .\$\$da 'cb'k YY_YbXg'fI *) 'XUmg'U'm'YUfI" Ʒmci
UfY'i bUV'Y'hc'gi Va]hmc i f'Ugg][ba YbhiXi Y'hc'U'Zi 'hk]h'Hi fb]h]b'mci 'a UmUdd'm'Zc'f'Ub'YI HYbg]cbž'Vi hmc i
a i ghfYhU]b'mci f'h]W_Yhbi a VYf'Z'ca '9I HYfbU'Gi ddcfhfU'cb['k]h'Ubmc'h'Yf'fY'Yj UbhXc'W a Yb'g'k'hc
]bWi XY'Ug'Yj]XYbV'hc'gi ddcfhmc i f'YI HYbg]cb'Udd'j]W]h]cb" Ʒmci 'Ya U] '9I HYfbU'Gi ddcfhmc i 'k]
Ui 'ca U]W]m'fY'W]j Y'U'h]W_Yhbi a VYfž'Vi h]Zmci 'HY'Yd\cbY'mci 'k]'b'Y'X'hc'gd'Y'W]W]m'Ug_'Zc'f'cbY"
Hi fb]h]b'U'gc'dfcj]XYg'i dXUH'g'cb'h'Y]f'gm'g'Ya 'g'hU'g'cb'Hk]h'Y'f"

; YbYfU'mž'UggYgga YbhiHUg_g'a i ghVY'gi Va]h'Y'X'Y'Y'W'f'cb]W]m'j]U'Y]h'Y'f'Hi fb]h]b'cf'U'A ccX'Y
Ugg][ba Yb'h' 'b]bg'h'U'b'W'g'k \Y'f'Y'h'g]g'bc'h'd'c'gg]V'Yž'hk]'VY'g'h'U'Y'X'cb'mci f'W'ci fgY'g'A ccX'Y'g]h'k]h
U'HY'fb'U'h] Y'gi Va]gg]cb'XY'hU]g"

: cf]bZ'fa U]cb'cb'\ck 'hc'gi Va]h'Ugg][ba Yb'g'cb]b'Y'j]U'A ccX'Y. \h'hdg.#gh XYb'h'i bgk "YXi "Ui #ck!
gi Va]h'Ugg][ba Yb'h'a ccX'Y

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

D`U[]Uf]ga `]g`i g]b[`hY`k cfXg`cf`]XYUg`cZc`hYfg`UbX`dfYgYbh]b[`hYa `Ug`mci f`ck b" `#WUb`hU`Y`a Ubm
Zcfa gZ`Zca `XY`]VYfU`h`V`X`Y`U`h]b[`h`U`W`Y`X`Y`b`h`U`m`W`c`d`m]b[`Z`ca `U`gci f`W`k]h`ci h`U`W`b`c`k `Y`X[`Y`a `Y`b`h`

I B G K ` [fci dg`d`U[]Uf]ga `]b`h`c`h`Y`Z`c`ck]b[`W`U`h`Y` [cf]Yg.

7 cdm]b[.`i`g]b[`h`Y`g`U`a `Y`cf`j`Y`fmg]a]U`f`k`cf`X`g`h`c`h`Y`cf][]b`U`h`Y`h`cf`]X`Y`U`k]h`ci h`U`W`b`c`k `Y`X[]b[`h`Y`

- i bXYfghUbx'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'Ubx'5W'W'dhUV'Y'I gY'cZ I BGK '⇒H'F'Ygci f'W'g'Dc`]W'h
- VY'Uk UfY'cZ'Y'ghUbxUfXg'cZVY\Uj]ci f'YI dY'W'X'cZYj Yfmcby`]b'h'Y'I BGK 'W'a a i b]m
- 'cW'W'h'gYfj]W'g'UbX'j]bZ'fa U]cb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZ'Y'gY'UfY'Ug'k]''VY'ZJa]]Uf'hc'mci ž'c'h'Y'f'g'k]''VY'bYk "'; U]b]b['U'gc`]X'i bXYfghUbx]b['cZU''h'Y fY'U'Y'X'UgdY'W'g'cZ9@-G9'k]''\Y'd'mci 'a U_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\h'hd.##gi V'Y'W'f'i \]X'Y'g"'\]V'f'U'f'm'i b'gk "Y'X'i "U'i #' \]g'Y'#J'V'c'i h' \]g'Y](#)

5 WUXYa]W**ϕ**Zcfa Uh]cb

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