



MDIA2003

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9a U]`:

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Gi a a UfmicZ`h`Y'7 ci fgY

H\]g`W`i fgY`]g`W`bW`fbYX`k]h`h`Y`g_]`g`fYei]fYX`hc`dfcXi W`UbX`W`h]W`m]UbU`mgY`h`Y`cb[Yfz`a`cfY`]b!
XYd`h`Z`fa`g`cZ`ci`fbU`]ga`_`bck`b`Vmgi`W`UVY`g`Ug`"ZYU`h`fY""UbX`"XcW`a`Yb`hU`fn""H`Y`W`i`fgY`k`]`Z`W`g`cb
h`Y`gY`cb[Yf`Z`fa`g`Ug`h`Y`mcdY`fU`h`]b`bYk`gdUdY`fgz`a`U[U`h]bY`g`z`fUX]c`UbX`cb`]bY`z`UbX`ck`h`Y`mj`U`fm
U`W`W`fX]b[`hc`gi`V`Y`W`h`a`U`h`Y`f`-`]Y""U`W`W`fX]b[`hc`k`Y`h`Y`f`h`Y`m]U`fY`W`b`W`fbYX`k]h`W`f`fY`b`h`U`Z`U]fg`UbX`gc`W`U`
]ggi`Y`g`z`c`f`k]h`U`f`hg`UbX`Y`b`h`f`h`U]ba`Y`b`h`c`f`]Z`g`m`Y`UbX`Y]gi`fY`h`c`d]W`g""H`Y`W`i`fgY`k`]`U`gc`d`f`c`j]XY
g`h`X`Y`b`h`g`k]h`U`b`i`b`X`Y`f`g`h`U`b`X]b[`c`Z`k`U`h]g`h`m`d]W`m]bj`c`]Y`X`]b`h`Y`d`f`Y`d`U`f`U`h]c`b`c`Z`Z`U`h`f`Y`g`UbX
X`c`W`a`Y`b`h`U`f]Y`g`-`Y"[""ck`h`Y`m]U`fY`W`b`W`j]Y`X`z`ck`h`Y`m`a`U`m`f`Y`e`i]fY`h`Y`W`h]j`U`h]c`b`c`Z`U`d`d`f`c`d`f]U`h`Y
"W`b`h`U`W`g"z`UbX`h`Y`h`m`d`Y`g`c`Z`f`Y`g`Y`U`f`W`k`UbX`]b`h`f`j]Y`k]b[`i`gi`U`m`Y`a`d`c`m`Y`X""`b`h`Y`d`f`c`W`g`g`c`Z`X`Y`j`Y`c`d]b[

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5ggYgga Ybh&.`A YX]U`WcbhYbhdFYdUfU]cb`UbX`dfcXi W]cb`hUg_`%`

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

5ggYgga Ybh' . A YX]U`WcbhY`bhdfYdUfUh]cb`UbX`dfcXi`W]cb`hUg_`&

GHUfhXUH` . Bch5dd`]WV`Y

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GYY`Wci`fgY`A`ccX`Y`g]hY`Zcf`XYhU]`g"

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		&"l dXUHY'cb'W ffYbh]ggi Yg'j'ba YX]U'Wtj YfU[Y
	Hi hcf]U`	fGYY'A ccX'Y'k YVg]HY'Zcf'i dXUHYX'j'bz'fa Uh]cb UVci h'h'Y'h' hcf]U`! 'gWXYXi `Y'a UmVX Ub[Y'Ug W ffYbh'Yk g'Yj Ybhg'i bZc`X`E DfcZ]Y'k f]hb['HYghfi b'! 'df]bhg'cfmUbX'g'cfhUi X]c dUW_U[Y'f('a]bi h'g'k'dfYdUFYX'j'b'UXj UbW'cZhi hcf]U` Zca 'fYW'fX]b[g#fUbgW]dhg'cZ]bh'fj]Yk g
K YY_(.; 'A UfW '!:%& A UfW	@YWh fY	%">ci fbU]gh]W'bgd]fU]cb. "'ZYg\z'W ffYbhUbX Yb[U[]b["'! 'h'Y]XYbh]Z]W]h]cb'f'f'W'cbW'dh]cb'cZ di V]g\UV'Y X]]]h'W'cb'h'bh &"A UbU[]b['cb']bY'di V']W]h]cbg'!'7 cb'h'bh A UbU[Ya Ybh'Gmg'h'a g'f'7 A G'k'YV'dU[Y'XYg]] b
	Hi hcf]U`	fGYY'A ccX'Y'k YVg]HY'Zcf'i dXUHYX'j'bz'fa Uh]cb UVci h'h'Y'h' hcf]U`! 'gWXYXi `Y'a UmVX Ub[Y'Ug W ffYbh'Yk g'Yj Ybhg'i bZc`X`E -bh'fj]Yk 'k cf_g\cd'dfYdUFU]cb'!'Y"["'YI d'cfY dch'bh]U`''bYg'cZ]bei]fm'z'dch'bh]U`''di V]g\UV]]m'/ XfUZh'gca Y'ei Ygh]cbg
K YY_) : % 'A UfW '!:%- A UfW	@YWh fY	Dcgg]V'm-@bh'fj]Yk]b['K cf_g\cd'fXYdYbX]b['cb'\ck h'Y'gWXYXi `Y'dUbg'ci E
	Hi hcf]U`	%"F Yj]Yk 'cZg'cfm]XYUg'gi Va]h'YX'Zcf'hi h'Y'dfYd' &"'7 Ubj Ugg]b['cZdfca]g]b['hcd]WUfYUg'Zcf]ggi Yg#fYbX'ZYUh'fYg
K YY_*. '&&'A UfW '!:'& A UfW		: 'YI 'k YY_!' 'bc' 'YWh' fY'cf'hi hcf]U` .
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K YY_+. '&- 'A UfW '!:'& '5df]`	@YWh fY	-ggi Yg#fYbX'ZYUh'fYg -]XYUg'z'Ub['Yg'z'ghm'Yg'UbX gh'fi Wh'fYg
	Hi hcf]U`	GYY'W'ci fgY'A ccX'Y'g]HY'Zcf'XYH]g]" .
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K YY_%. %- '5df]'!'&' 5df]`	@YWñ fy	H65
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DfYgWf]VYX`F Ygci fWg`

Bc`dfYgWf]VYX`hYI hVcc_žVi hñY`Zc`ck]b[`]g`fYWca a YbXYX`Ug`Ui gYZ`fYZfYbW`fgca Y`[ccX`UXj]W`cb
U`fUb[Y`cZX]ZYfYbhgfcfmihdYgŁ`HUbbYfžG/? Ug]b[Yf`A /F]WUfXgcb`B`ž`&`\$`%+ 8V\$fgdWl`df`Y, F W`f`Y fZW

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

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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'f'gi 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'UbmcH'Yf'f'Yj UbhXcW a Yb'f'g'hc
]bWi XY'Ug'Yj]XYbVW'hc'gi ddcfhmci f'YI HYbg]cb'Udd']W]h]cb" Ʒmci 'Ya U] '9I HYfbU'Gi ddcfhmci 'k]
Ui 'ca UH]W]m'f'YW]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'gmgh'Ya 'ghU'hi g'cb'Hk]H'Yf"

; 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 YbH' 'b]bg]H'UbVW'g'k \YfY'H'g]g'bc]hd'cgg]V'Yž'hk]'VY'gh'UH'X'cb' mci f'Wci fgY'g'A ccX'Y'g]H'k]H
U'HY'fbUH] Y'gi Va]gg]cb'XYHU]g"

: cf]bZ'fa UH]cb'cb'\ck 'hc'gi Va]hUgg][ba Yb'g'cb]bY'j]U'A ccX'Y. \h'hdg.#gh XYb'hi bgk "YXi "Ui #ck!
gi Va]hUgg][ba Yb'ha ccX'Y

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

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Zcfa gZ`Zca `XY`]VYfU`h`V`X`Y`U`h]b[`hc`UW`Y`X`Y`b`U`m`W`c`d`m]b[`Zca `U`gci f`W`k]h`ci hUW`bck `YX[Ya Yb`h`

I BGK `[fci dg`d`U[]Uf]ga `]bhc`hY`Zc`ck]b[`W`h`Y[cf]Yg.

7 cdm]b[.`i`g]b[`hY`gUa Y`cf`j Yfmg]a]Uf`k cfXg`hc`hY`cf][]bU`hY`hcf]X`Y`U`k]h`ci hUW`bck `YX[]b[`hY`

- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V]]hYg'Ug'U'gh XYbhUhl BGK
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5 WUXYa]WbZcfa Uh]cb

: cfYggYbh]U`gh XYbh]bZcfa Uh]cb fY`Uh]b[`rc.

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- I BGK `<YU`h`UbX`GUZY`mdc`]WYg/
- YI Ua]bUh]cb`dfcW`Xi fYg/
- gdYW]U`W`bg]XYfUh]cb`]b`hY`Yj YbhicZ]`bYgg`cf`a]gUXj Ybh fY/
- gh XYbhYei]m]UbX`X]gUV`]m/
- UbX`c`hYf`YggYbh]U`UWUXYa]W]bZcfa Uh]cbz`gYY

[\ftdg.#k k k "Uftg"i bgk "YXi "Ui #W ffYbh\]gh XYbh\]bZcfa Uh\]cb#dfch`W`g`\[i \]XY`\]bYg#](#)

⇒ U[Y`7fYX]h

D\chc`VmK`]gcb`J`]rcf]bc`Zca`[DYI`Y`g](#)

7F ⇒ CG

7F ⇒ CG`Dfcj]XYf`7cXY.`\$\$\$- ;

5W_bck`YX[Ya YbhicZ7ci bhfm

K`Y`UW_bck`YX[Y`hY`6YXY[U`dYcd`Y`k`c`UfY`hY`fUX]h]cbU`W`ghcX]Ubg`cZ`hY`UbXg`cb`k`]\W`I`BGK`
?Ybg]b[`rcb`W]a`di`g`]g`c`W]hYX"