



MDIA1004

BYk g: i bXUa YbHJ`g

HYfa `Hk c`#`&\$&\$

7ci fgY`Cj Yfj]Yk

GHJZ7cbhJW`8YHJ]`g

7cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj]`m	@cWjhcb	D\cbY
8f? YffjY`8Uj]Yg	_"XUj]Yg4 i bgk "YXi "Ui	6mUddc]bha Ybh	F cVYfh K YVghYf' %%7	

Hi hcfj

B Ua Y	9a Uj`	5j Uj`UVj]`m	@cWjhcb	D\cbY
>c\b`6i fZ]h	^Vi fZ]h# i bgk "YXi "Ui]b`WUgg`!`d`YUgY gYY`Wcbj Ybcf? YffjY 8Uj]Yg`Zcf Uddc]bha Ybhg ci hg]XY`WUgg`hja Y	j]U`Ya Uj`	

GWcc`7cbhJW`bZcfa Uh]cb

GWcc`cZhY`5fng`UbX`A`YX]U

Fcca " %&ž@Yj Y"" žF cVYfhK YVghYf`6i]X]b[`f] %Ł

D\cbY. f\$&Ł- ' ,) `(,) *

9a Uj]: [gUa 4 i bgk "YXi "Ui](#)

K YVg]hY: [k k k "Ufng"i bgk "YXi "Ui #gUa](#)

H\Y`GWcc`cZhY`5fng`UbX`A`YX]U`k ci `X`_]Y`h`F`YgdYWZ`m5W_bck`YX[`Y`h`Y`HfUX]hcbU`7i`g]cX]Ubgž`h`Y`6YXY[`U`f`P`Ybg]b[`hcb`W]a`di`gŁž;`UX][`U`f7`]mUbX`5f]i`8Yg][`b`7`Ua`di`gYgŁ`UbX`h`Y`B[`i`bbUk`U`dYcd`Y`f5i`gfU]Ub`8YZYbW`:`cfW`5WUXYa`m]b`7`UbVYffUŁcZhY`UbXg`k`YfY`YUW`W]a`di`g`cZI`BGK`]g`cW]hYX"

5ggYgga Ybh

H\Y'YI Ua 'k]`VY'U_Y'\ca Y'cdYb'Vcc_"Mci 'k]`\Uj Y'&('\ci fg'hc'Wca d'YH']h'

Hi hc]U'g'UFY'Wca di 'gcfm' C b'mfk c'WUb'VY'a]ggYX"D'YUgY'gYY'h\Y'Wcbj Ybcf'cf'mci f'hi hc]Zmci 'UFY
i bgi fY"GdYWU'Wcbg]XYfU]cb'fYei]fYX']b'WUgYg'cZa cfY'h'Ub'fk c'UVgYbW'g"D'YUgY'bc'h'h\YmiUFY'&")
\ci fg'UbX'k]`VY'cb']bY"5W'W'gg'j]U'7c`UVcfUH']b_g'cb'A ccX'Y"

GdYWU'Wcbg]XYfU]cb'j]U'a mi bgk "YXi "Ui ']g'fYei]fYX'Zcf'Ubm'UH'UggYgga Ybhg'z'ch\Yfk]gY'h'g')
i 'dYf'XUm'D'U[]Uf]ga 'k]`VY'fYZ'ffYX'hc'h\Y'GVX'cc'fg'Yh']Wg'cZZ'W'f"

7cbgi 'hb['\ci fg'k]`VY'Uj U]UV'Y'ci hg]XY'h'hc]U'hja Yg! Z Zf]XYc_X'U]a Y4 mi bgk "YXi "Ui 'Zcf'hja Y

Hi fb]h]b'gYH]b[. 'H\]g'Ugg][ba Ybh]g'gi Va]mY'X'fci [\ 'Hi fb]h]b'UbX'ghi XYb]g'Xc'bc]gYY'Hi fb]h]b
g]a]Uf]mifYdcf]g"

5ggYgga Ybh&. 'BYk g'dfcXi W]cb'dUW_U[Y

GHUfhXUH. 'Bch5dd]WUV'Y

@Yb[h. '*\$\$'+\$\$'k cfXg'cf'Zci f'hc'Z] Y'a]bi h'Ui X]c

8YH]g.

C f][]bU''bYk g'dfcXi W]cb'dUW_U[Yz*\$-\$'+\$\$'k cfXg'gi Va]mY'X'CF'Zci f'hc'Z] Y!a]bi h'fUX]c'bYk g
dUW_U[Y'j]U'A ccX'Y"

; fUXYX'j]U'UggYgga YbhW]h]f]Uzk f]mY'b'ZYXVUW_j]U'@A G"

5XX]h]cbU'XYH]g.

Hcd]WUgg][bYX']b'WUgg"

C f][]bU''d\ch'fYei]fYX"

A]b]a i a 'k c]bh]f] Yk gzd'i g'Y]]XYbW'cZgi dd'Ya Yb]Uf]mifYgYUfW"

B UffU]h] Y'cf'fUX]h]cbU''bYk g'gmiY'ci fbU']ga "

Gi Va]gg]cb'bc]h]g.Gi Va]gg]cb'j]U'A ccX'Y

Hi fb]h]b'gYH]b[. 'H\]g'Ugg][ba Ybh]g'gi Va]mY'X'fci [\ 'Hi fb]h]b'UbX'ghi XYb]g'Xc'bc]gYY'Hi fb]h]b
g]a]Uf]mifYdcf]g"

5ggYgga Ybh' . 'CdYb'6cc_'HU_Y'<ca Y'9I Ua

GHUfhXUH. 'H65

8YH]g.

H\Y'YI Ua 'k]''VY'U'f]U_Y'\ca Y'cdYb'Vcc_'YI Ua 'hUhk]''bj c] Y'dfUW]W'VUgYX'k f]h]b['fUg_gz'Udd']YX
_bck'YX[Y'UbX'fYgYUfW"'GdYW]Z]W]bZ'fa U]cb'hc'VY' []j Yb']b'WUgg"

H\Y'YI Ua 'k]''VY'gW\YXi 'YX']b'K YY_'%%'5'&('\ci f'h]a Y'dYf]cX'k]''VY' []j Yb'hc'Wca d'YH' h\Y'YI Ua "'

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

9I Ua `XUH`Hc`6Y`5Xj]gYX"

Hi fb]h]b`gYh]b[. H\]g`Ugg][ba Ybh]g`gi Va]h]X`h]fci [\ `Hi fb]h]b`UbX`ghi XYbh]Xc`bch]gYY`Hi fb]h]b`g]a]Uf]mifYdcfrg"

5 hYbXUbW'F Yei]fYa Ybhg

Gh XYbhg'a i ghUhhbX', \$i 'cZh'hc'f]U'g'hc'a YYhUhhbXUbW'fYei]fYa Ybhg'cZh'g'W'ei fgY"

7 ci fgY'GWXYXi `Y

[J\]Yk`WUgg'hja YhUVY](#)

H]a YhUV`Y`

8UhY	HmdY	7cbhYbh
K YY_%'%>i bY!') `>i bY	@YWh fY	ϑhfcXi W]cb'hc'hY'W'ei fgY" ;` fWdSuf[hW>WUfgdWa` ↑ Wh[S 5a^STadSfW dWd fa ? aaV^Wfa `a[fZW↑]ž @YWh fYg'k]`VY`j] Yž]bhYfUWh] YžUbX'gca Yhja Yg \Uj Y'k f]h]b[`YI YfW]gYg"Mc i fi`VY`]bj]hX'hc'g\UfY bYk g`]b_gžUg_`ei Ygh]cbg'UbX'W'ca a Ybh'
	Hf]b'ria l	3^fgfadS`e i [^TWdg` h[S 5a^STadSfWž <a[kagd fgfadS^h[S 5a^STadSfWž 6a`afei Sb kagdfgfadS`e Scdg` V Žkag i [^TW_ Sd] W STeW fž
K YY_&.`; `>i bY!'%& >i bY	@YWh fY	@YWh fY`WU Ub[Y'h.]g'k YY_`cb`mh'c'HI 9G85M %\$Ua `Xi Y'hc'E i YYbfg'6]fhXUmdi V`]W\c`XUm' Cdh]cbU`UhhbXUbW.`BYk g'k f]h]b[.`fyj]g]cb'cZ hfUX]h]cbU`bYk g'ghm'Y`UbX']bhYfj]Yk]b[`%%` <a[fZW^WUfgdWh[S fZW5a^STadSfW↑] S^"

<p>K YY_'.% ' >i bY!'-% >i bY</p>	<p>@YWi fY</p>	<p>C b`]bY'@YWi fY. 'BUffUHj Y`bYk g` <a[h[S fZW5a^STadSfW↑] a` ? aaV^W F YUX]b[g F YZf'hc`A ccX`Y . . .</p>
	<p>Hi hc]U`</p>	<p>B UffUHj Y`bYk g`k f]h]b[`dfUWj]VW" <a[kagdfgfadS^h[S 5a^STadSfW↑] a` ? aaV^W</p>
<p>K YY_(. &&'>i bY!'&*
>i bY</p>	<p>@YWi fY</p>	<p>C b`]bY`YWi fY. `H\Y`i bhc`X`ghc`fm`F YgYUfW]b[`" 6f]YZZc`f`c]f[]bU`ghc`fmdfcXi`W]cb`dUW_U[Y <a[h[S 5a^STadSfW↑] a` ? aaV^W F YUX]b[g F YZf'hc`A ccX`Y</p>
	<p>Hi hc]U`</p>	<p>C f][]bU`ghc`fm`fYgYUfW]`UbX`VfU]bg`hc`fa]b[" <a[h[S 5a^STadSfW` ? aaV^W</p>
<p>K YY_)'.&- '>i bY!'` '>i `m</p>	<p>@YWi fY</p>	<p>C b`]bY'@YWi fY. `b]hcXi`W]cb`hc`bYk`g`fUX]c` k`f]h]b[`UbX`]b]Yf]]Yk]b[`W`hg <a[`WUfgdWh[S 5a^STadSfW↑] a` ? aaV^W F YUX]b[g F YZf'hc`A ccX`Y"</p>
	<p>Hi hc]U`</p>	<p>C f][]bU`ghc`fm]XYU`d]hW`ZYXVUW_ <a[kagdfgfadS^h[S fZW5a^STadSfW↑] a` ? aaV^W D WèWsdJZ 3eeWèe_ W f 6gW</p>
<p>K YY_*. * '>i `m!`%\$ '>i `m</p>	<p>F YUX]b[</p>	
<p>K YY_+. % '>i `m!`%+ '>i `m</p>	<p>@YWi fY</p>	<p>C b`]bY`YWi fY.]b]Yf]]Yk]b[`UbX`cd]b]cb`hfUdg` <a[kagdfgfadS^h[S fZW5a^STadSfW↑] a` ? aaV^W F YUX]b[g F YZf'hc`A ccX`Y" .</p>

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

F YWta a YbXYX`HYI Hcc_"

5b`9Vcc_g\ci`X`VY`Uj`Uj`UV`Y`hc`Vc`ffck`j`jU`I`BGK`"jVfUfm`"K`Y`Xc`bchYI`dYWhmci`hc`Vi`mh]g`HYI`Hcc_"
<ck`Yj`Yfz]Zmci`k`ci`X`"Y`hc`di`fWUgY`]fz`hY`HYI`Hcc_"g`Uj`Uj`UV`Y`j`jU`hY`"L`BGK`Vcc_g\cd"

Hfi`^`cz`H`f&\$%`L`I`d[f`Y`S`V`DWbadf`Y`@W`e`Kag`5S`GeW`CI`cb".`F`ci`hYX`[`Y`"

Zmci`UfY`dfcXi`Wb[`Ui`X]cz5I`857`HM]g`U`ZY`Y`cb`]bY`Ui`X]c`YX]hb[`gc`Zk`UfY`cf`hY`a`cfY`UXj`UbWXX`
5I`8`H`B`]g`UWXXgg]V`Y`j`jU`58C69`7`fYUhj`Y`7`ci`X`"

F YWta a YbXYX`F Ygci fWg

H\Y`Wci`fgY`fYei`]fYg`Vch`bUhc]cbU`UbX`]bhYfbUhc]cbU`W`ffYbhUZZU]fg`_bck`YX`[`Y`k`]\`W`i`gi`U`m]bZcfa`g`hY`
YI`Ua`"`h]g`fYWta`a`YbXYX`gh`XYbtg`fYUX`k`jXY`mUWfcgg`5i`gfU`]Ub`UbX`]bhYfbUhc]cbU`bYk`g`UbX`W`ffYbh`
UZZU]fg`d`UhZcfa`g`"

Gi`[[`YghX`ZY`Y`bYk`g`g]hYg.

567]j`Yk`bYk`g`W`UbbY`."`+`"\$`fYdcfhiUbX`Yj`Yb]b[`bYk`g`
UWwbyH`Ui`Zc`f`cb`]bY`bYk`g`"

567`F`UX]c`B`Uhc]cbU`#`Hf]d`Y`>`#567`GmXbYmF`UX]c`

H\Y`Dfc`YWh`B`Yhk`cf`_%`\$`

gVg"Wta`"Ui`#`bYk`g`

FZW9gSd/[S`hY`[`i`UfX]Ub"Wta`#`Ji`

I`G`Dc`]hWg`H\Y`@`U`h`G`ck`k`]h`G`H`d`Y`b`7`c`VY`fhfj`jU`Mci`Hi`VY`E`/`W`bb"Wta`/`@`U`h`B`][`h`k`]h`G`Y`h`A`Y`m`f`g`
fj`jU`Mci`Hi`VY`E`>`c`b`C`j`Y`f`

@]a`]hYX`ZY`Y`j`jYk`]b[`!`Uj`Uj`UV`Y`j`jU`I`BGK`"jVfUfm`

FZWEkV`Wk`?`ad`[`Y`:`W`S`V`ga`\"Wta`"Ui`

FZW@W`Kad`F`_`W`e`b`m]ja`Yg"Wta`

9b[`]g`\`Ub[`i`U`[`Y`<`cb[`?`cb[`"UbX`7`\]bU.`FZWEagfZ`5Z[`S`?`ad`[`Y`BaefgW`d"Wta`

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

:`YYXVUW`h`fci`[`\`ci`h`hY`Wci`fgY`]g`k`Y`Wta`Y`Ug`k`Y`"Ug`]b`fa`mYI`dYf]YbWfjgi`fj`Ymg`"K`Y`YbWci`fU`[`Y`mci`hc`
Yhi`g`_bck`mci`UfY`ghfi`[[`]b[`cf`YI`dYf]YbW]b[`X]Z]W`h]Yg`k`]h`cb`]bY`hi`hc`f]U`g`Uh`hY`h]a`Yz`fU`h`Y`f`h`Ub`
k`U]h]b[`i`bh`hY`YbX`cZ`hY`Wci`fgY`"

H\Y`Wci`fgY`\Ug`Yj`c`j`YX`Zca`h`fUX]h]cbU`bYk`g`fYdcf]b[`hc`]bW`XY`hY`bYk`a`YX]U`YI`dYWU]h]cbg`cZ`
bUffU]h]Y`bYk`g`z`gc`W]U`a`YX]U`fYdcf]b[`za`cV]Y`ci`fbU]ga`UbX`\Ug`U`[`fYU`h`f`Z`W`g`cb`fUX]c`k`f]h]b[`"H\]g`

mYUf'k Y'UfY'UXUdh]b['hY'YI Ua 'Zcf'cb']bY'UbX'U'gc'cZYf]b['hY'cddcfh b]hmhc'dfcXi W'Ui X]c'Ug'mei f
a U'cf'Ugg][ba Ybh'

5g'A 8-5%\$\$&'ZcW gYg'cb'hfUX]hcbU'bYk g'k f]h]b['g_]`gžh]g'g_]`']g'cb'mVf]YZmWčj YfYX']b'h]g'Wči fgY''Hc
Ugg]ghgh XYb]g'k \c \Uj Y'bchdfYj]ci g'migh X]YX'bYk g'k f]h]b[žk Y'YbWči fU[Y'mei 'hc'UWwYgg'fYj]g]cb
fYgci fWg'cb'A ccX'Y'UbX'hc'a U_Y'Ub'Uddc]Y' bX'h 'Wči fg'W Uj jY Y \U W' h]Y

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

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

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`]VYfUHY`WXYUH]b[`hc`UWV]XYbhU`mWc`dm]b[`Zca `U`gci fW`k]h`ci hUW`bck `YX[Ya Ybh`

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

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

5 WUXYa]WbZcfa Uh]cb

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

- fYei Yghg`Zcf`YI hYbg]cb/
- `UhY`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I BGK `<YU`h`UbX`GUZYmidc`]WYg/
- YI Ua]bUh]cb`dfcWYXi fYg/
- gdYW]U`Wc]bg]XYfUh]cb`]b`hY`Yj YbhcZ]`bYgg`cf`a]gUXj Ybh fY/
- gh XYbhYei]m]UbX`X]gUV`]m/
- UbX`c`hYf`YggYbh]U`UWUXYa]W]bZcfa Uh]cbz`gYY

[\fhdg.#k k k "Ufng"i bgk "YXi "Ui #W ffYbh\]gh XYbh\]UWUXYa \]W\]bZcfa Uh\]cb#dfchWc`g!\[i \]XY`\]bYg#](#)

⇒ U[Y`7 fYX]h

BY[Uh] Y`GdUW`j]U`DYI Y`7 fYUh] Y`7 ca a cbg`]WbW"

7F ⇒ CG

7F ⇒ CG`Dfcj]XYf`7cXY.`\$\$\$- ;

5W_bck`YX[Ya YbhcZ7ci 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`cW]hYX"