



MDIA2006

7ca a i b]WU]cb`GhfUHY[]Yg

GYa YghYf`C bY`##`&\$%

GWXcc`cZHA Y`5ftg`UbX`A YXJU`##`I BGK`..5ftg`UbX`GcWU`..GWYbWg

dYfa]gg]cb Zca 'hY'7ci fgY'5i hcf]mžUbX'k \YfY'Udd']WUV'YžhY]f'fYei Yghg\ci 'X'VY'UWwta dUb]YX'VmUb
cf][]bU'cf'Wf]jZYX'WcdmcZU'a YX]W'Wf]jZYX'cf'chYf'Zca 'cZUddfcdf]UHY'Yj]XYbW"

5'7ci fgY'5i hcf]ma UmYI W'gY'U'gh XYbhZca 'WUggYg'cf'UWf]]hYg'Zcf'i d'hc'cbY'a cbh'"<ck Yj YfžhYm
a UmUgg][b'UXX]hcbU'UbX#cf'U'hYfbU]j Y'hUg_g'hc'Ybgi fY'Wta d']UbW"'5'7ci fgY'5i hcf]mVcbg]XYf]b['hY
[fUbh]b['cZUVgYbW'a i ghVY'gU]gZYX'U'gh XYbhk]'gh'~'VY'UVY'hc'a YYh'hY'Wti fgY'g'YUfb]b['ci h'Wta Yg
UbX#cf]j c'i a Y'cZ'YUfb]b["'5'gh XYbhgYY_]b['Uddfcj U'hc'VY'UVgYbhZcf'a cfY'h'Ub'cbY'a cbh'a i ghUdd'm
]b'k f]h]b['hc'hY'8YUb'UbX'dfcj]XY'U'~'cf][]bU'cf'Wf]jZYX'gi ddcf]h]b['XcW'a Yb]U]h]cb"

: cf'a cfY']bZca U]cb'UVci h'hY'U'hY'bxUbW' dfch'Wc'g']b'hY': UW' hmcZ5fng'UbX'GcW]U'
GWYbWg: [\fhdg.##k k k"Ufng"i bgk "YXi "Ui #W ffYbh\]gh XYbhg#UWUXYa \]W\]bZca U\]cb#dfch'Wc'gl\[i \]XY'\]bYg#](#)

5 WUXYa]W]bZca U]cb'

: cf'YggYbh]U'gh XYbh]bZca U]cb'fY'U]h]b['hc' f'Yei Yghg'Zcf'YI h'bg]cb/fYj]Yk'cZa Uf_g/cWw dU]cbU'~'YU'h
UbX'gUZ]m'YI Ua]bU]cb'dfcW'Xi fYg/gdYW]U'Wcbg]XYfU]h]cb']b'hY'Yj YbhicZ]'bYgg'cf'a]gUXj Ybh fY/
gh XYbhYei]mUbX'X]gUV']]m'UbX'chYf'YggYbh]U'UWUXYa]W]bZca U]cbž
gYY' [\fhdg.##k k k"Ufng"i bgk "YXi "Ui #W ffYbh\]gh XYbhg#UWUXYa \]W\]bZca U\]cb#dfch'Wc'gl\[i \]XY'\]bYg#](#)

7ci fgY'8YHJ]`g

7fYX]hDc]bqg`*`

Gi a a UfmicZh\Y'7ci fgY

Gi VYWh5fYU.`? VW[S

H\]g`Wci fgY`ZcW`gYg`cb`h\Y`df]bW]d`YgžXnbUa`]Wgž`UbX`dUfh]W`Ufg`cZgfUth`[`mh\Uhi`bXYfd]b`
Wca`a`i`b]WWh]cb`]b]h]U]j`Yg`UWfcgg`h\Y`gi`V!X]gW]d`]bYg`cZdi`V`]WfY`U]c]bg`UbX`UXj`Yfh]g]b[``"Mc`i`k`]`VY

5ggYgga Ybh

: cf'XYHU]YX'UggYgga Ybh]bZcfa Uhjcbzd'YUgY'gYY'hY'A 8=5'&\$\$*'A ccX'Y'g]h''

5ggYgga YbhHUg_g'

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH'	Gh XYbh@YUfb]b[Ci hWta Yg'5ggYggYX
9bj]fcba YbhU'gWUb'	' \$i	\$\$#\$(#&\$% '%%\$\$'DA	%z&
7]YbhVf]YZUbX'XYg][b'cZ ghfUH' []WZUa Yk cf_'	(\$i	&&#\$(#&\$% '%%\$\$'DA	%z&
GhfUH' []WXcW a YbhUbX']b! WUgg'dfYgYbhUhjcb'	' \$i	' \$&+#\$) #&\$% '%%\$\$'DA	%z&Z

5ggYgga Ybh8YHU]`g

5ggYgga Ybh' . 'GhfUHY []WXcW a YbhUbX ']b!WUgg'dfYgYbHh]cb

GHUfhXUHY . %(# \$) # & \$ % ' \$ - . \$ \$ ' 5 A

8YHU]`g. ' # '[fci dg'cZ('hc') žgñ XYbhg'k]`dfYdUFY'U:&) \$\$'k cFX'ghfUHY[mXcW a Ybh'5 '_YmWta dcbYbhcZ
h\]g'UggYgga YbhH]g_]g'U'%'\$!a]bi HY'dfYgYbHh]cb" H\Y'k Y][\h]b['cZhY'dfYgYbHh]cb]g') \$'dYfW'bhicZ h\]g
UggYgga Ybhž'cf'i d'hc'%) 'a Uf_g"H\]g']g'h\Y'Z]bU'UggYgga YbhH]g_ 'Zcf'UHYbXUbW' di fdcgYg": c`ck]b['h\Y
gi Va]gg]cb'cZh\Y'ghfUHY[mXcW a Ybhž'U[fci d'a Uf_'fUbX'ZYXVUW_ 'Zcf'VcH'h\Y'dfYgYbHh]cb'UbX'Z]bU'
XcW a Ybhž'k]`VY'dfcj]XYX'cb'h\Y'@YUfb]b['A UbU[Ya YbhGmgH'a ""

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

H\]g'[fci d'UggYgga YbhWta df]gYg'U'[fci d'dfYgYbHh]cb']b'K YY_'%%'UbX'Z]bU'XcW a YbhdYgYbHh]cb]b
K YY_'%&'H\Y'Z]bU'XcW a Ybhk]`VY'gi Va]HYX'Vmih\Y'[fci d'YUXYf'fb'nē'h\fc i [\ 'U'gdYW]U'[fci d
gi Va]gg]cb']b_'cb'h\Y'&\$*\$'A ccX'Y'g]hY"

Gi Va]gg]cb'bcHYg.D'YUgY'gYY'XYHU]YX'gi Va]gg]cb'dfchWt'cb'&\$*\$'A ccX'Y'g]hY"

Hi fb]h]b'gYHh]b[. H\]g']g'bchU'Hi fb]h]b'Ugg][ba Ybh

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gh XYbng`UfY`YI dYW`X`hc`di h`h`Y]f`bUa Yg`UbX`gh XYbhbi a VYfg`cb`Yj YfmdU[Y`cZ`h`Y]f`Ugg][ba Ybhg"

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

≠mci`YbWci bhYf`U`dfcV`Ya`k`Yb`U`h`Ya`dh]b[`hc`gi Va]hmcif`Ugg][ba Ybh`h`fci [\`Hi`fb]h]b`z`d`YUgY`h`Yd`cb`Y`9I`h`fb`U`Gi`ddcf`h`c`b`-`,`)`''`'`%cf`Ya`U]`h`Ya`cb`[YI`h`fb`U`h`h`gi`ddcf`h`i`bgk`"YXi`"Ui](#)

f`G][b]Z]WbhmUZZYWhmci f`dYfZcfa UbWV`]b`UggYggUV`Y`k cf_žVY`]hU`Zcfa U`YbX!cZgYa Yghf`YI Ua]bUh]cbžU
WUgg`hYghž`U`UVcfUhc`fmi`hYghž`U`gYa]bUf`dfYgYbUh]cb`cf`Ubmich`Yf`Zcfa`cZUggYgga`YbH`

: cf`Z`f`h`Yf`XYhU]`g`]b`fY`Uh]cb`hc`GdYWU`7`cbg]XYfUh]cb`]bWi`X]b[``K`Yb`hc`5dd`mž`<`ck`hc`5dd`m`UbX
`Gi`ddcfh]b[`8`cW`a`YbUh]cb`d`YUgY`fYZf`hc`h`Y`GdYWU`7`cbg]XYfUh]cb`k`YVgh]Y.`

[\fhdg.#gh`XYbH`i`bgk`"YXi`"Ui`#gdYWU`!Wcbg\]XYfUh\]cb](#)

5 WUXYa]W<c bYghmiUbX`D`U[]Uf]ga

D`U[]Uf]ga `]g`i g]b[`h`Y`k cfXg`cf`]XYUg`cZchYfg`UbX`dfYgYb]b[`h`Ya `Ug`mci f`ck b" `h`WUb`hU`Y`a Ubm
Zcfa gž Zca `XY`]VYfU`h`W`Y`U`h]b[`h`U`W`X`Y`b`U`m`W`c`d`m]b[`Zca `U`gci f`W`k`]h`ci h`U`W`b`c`k`Y`X[`Ya`Y`b`h`

I BGK `[fci dg`d`U[]Uf]ga `]b`h`Y`Z`c`k`]b[`W`h`Y`[`cf]Yg.

7 cdm]b[.`i`g]b[`h`Y`g`Ua`Y`cf`j`Y`fmg]a`]U`f`k`cfXg`h`c`h`Y`cf][`]b`U`h`I`h`cf`]X`Y`U`k`]h`ci h`U`W`b`c`k`Y`X[]b[`h`Y`
gci f`W`c`f`i`g]b[`ei`c`h`h`c`b`a`U`f`_`g`" `H`[`g`U`gc`U`dd`]Y`g`h`c`]a`U[`Y`gž`U`f`h`U`b`X`X`Y`g][`b`d`fc`Y`W`gž`U`g`k`Y`" `U`g`
dfYgYb]b]h`c`b`g`k` \`Y`f`Y`g`ca`Y`cb`Y`d`f`Y`g`Y`b]h`g`U`b`c`h`Y`f`g`]X`Y`U`g`c`f`k`cfXg`k`]h`ci h`W`Y`X]h`Y`[`cf]Yg.

- VYhYf'a UbU[Y'mci f'h]a Y
- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V']hYg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Vc'dmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi WñUbX'5WwdfUV'Y'l gY'cZ
I BGK '⇒H'F Ygci fW'g'Dc`]Wñ
-

7 ci fgY'GWXYXi `Y

[J\]Yk`WUgg`hã YhUV`Y](#)

H]a YhUV`Y`

8UH	HmdY	7cbhYbh
K YY_%`&*` : YVfi Ufm!`(` A UfVX	@YWh fy	ðhfcXi W]cb H\Y`cf][]bg`UbX`XmbUa]Wg`cZgfUH`[m H\Y`dfcV`Ya `cZgfUH`[]Ww`YfybWw GYY`A ccX`Y`Zcf`XYH]`g`cZfYUX]b[#]Yk]b[HI`HC`F`5@G`69;`B`H<`G`K`99?`"GYY`&\$\$* A`ccX`Y`g]h`Zcf`XYH]`g` .
K YY_`&.`) `A UfVX`!`:%% A UfVX	@YWh fy	;`Yh]b[`UbX`]bhYfdFYh]b[`hY`XUH. `hY`]a`dcf]UbWw`cZ YZYW]j`Y`fygYUfVX H\Y`Ybj]fcb`a`YbH`U`gW]b GYY`A`ccX`Y`Zcf`XYH]`g`cZfYUX]b[#]Yk]b[GYY`A`ccX`Y`Zcf`h`hcf]U`XYH]`g` .
K YY_`"`.:%&`A UfVX`!`:% A UfVX	@YWh fy	K` \UhUfY`hUW]Wg3 8]gh]b[i]g\]b[`hUW]Wg`Zca`ghfUH`[m 5`]b[b]b[`hUW]Wg`k`h`ghfUH`[m GYY`A`ccX`Y`Zcf`XYH]`g`cZfYUX]b[#]Yk]b[GYY`A`ccX`Y`Zcf`h`hcf]U`XYH]`g` .
K YY_`(`.:%`A UfVX`!`&) A UfVX	K YV	C`B`@`B`9`@`9`7`H`I`F`9 A`U_]b[`]hW]cYfy. `hY`ghfUH`[]WZ]Ua`Yk`cf`_"GYY A`ccX`Y`Zcf`YWh`fy`]b_" GYY`A`ccX`Y`Zcf`XYH]`g`cZfYUX]b[#]Yk]b[GYY`A`ccX`Y`Zcf`h`hcf]U`XYH]`g` .
K YY_`)`.:%&`A UfVX`!`:% 5df]`	F YUX]b[:`f]XUm` \$`A`UfVX`]g`;`ccX`:`f]XUmz`U`di`V`]W]c`]XUm .

		GYY`A ccX`Y`Zcf`XYHU]g`cZfYUX]b[#]Yk]b[GYY`A ccX`Y`Zcf`h`hcf]U`XYHU]g
6fYU_`&`5df]`!`:`5df]`	F YUX]b[H\]g]b`A]X!GYa YghYfVfYU_`k YY_`"Gh XYbhg`a][\`h`_`]Y`h`h`U_Y`UX] UbhU[Y`c`Z`h`Y`c`ddcfh`b]mih` WUHWX`i`d`c`b`f`YUX]b[""
K YY_`*`.-`5df]`!`%`5df]`	@YWh`fY	DF`g`h`f`U`H`[]Yg`UbX`h`U`W`]Wg` GYY`A ccX`Y`Zcf`XYHU]g`cZfYUX]b[#]Yk]b[GYY`A ccX`Y`Zcf`h`hcf]U`XYHU]g
K YY_`+`.%`5df]`!`&&`5df]`	@YWh`fY	5Xj`Y`f`h`g]b[`g`h`f`U`H`[]Yg`UbX`h`U`W`]Wg` 5B`N`5`7`8`5`M`Z`U`g`c`b`K`Y`X`b`Y`g`X`U`m`&`5df]`"5g`bc`h`h`hcf]U`g`U`f`Y`g`W`X`Y`X`i`Y`X`c`b`U`K`Y`X`b`Y`g`X`U`m]b`h`g`W`c`i`f`g`Y`Z`h`hcf]U`W`U`g`g`Y`g`U`f`Y`i`b`U`Z`Y`W`H`X`" GYY`A ccX`Y`Zcf`XYHU]g`cZfYUX]b[#]Yk]b[GYY`A ccX`Y`Zcf`h`hcf]U`XYHU]g
K YY_`-`.`&`5df]`!`&-`5df]`	K YV	C`B`@`B`9`@`9`7`H`I`F`9` 9b[U[]b[`a`Y`h`U`d`\`c`f`#`X`Y`Z`J`a`]]U`f`g`U`h`c`b`U`g`U`W`c`a`a`i`b]W`h`c`b`g`h`f`U`H`[m`GYY`A ccX`Y`Zcf`I`F`@`h`c`8`f`D`\\`]d`6`Y`"g`Y`W`h`f`Y`" GYY`A ccX`Y`Zcf`XYHU]g`cZfYUX]b[#]Yk]b[GYY`A ccX`Y`Zcf`h`hcf]U`XYHU]g` .
K YY_`-`."`\$`5df]`!`*`A`Um	@YWh`fY	G`h`f`U`H`[]W`c`a`a`i`b]W`h`c`b`U`b`X`g`c`W`U`a`Y`X]U` GYY`A ccX`Y`Zcf`XYHU]g`cZfYUX]b[#]Yk]b[GYY`A ccX`Y`Zcf`h`hcf]U`XYHU]g
K YY_`%`\$`+`A`Um!`%`A`Um	@YWh`fY	7`U`a`d`U][`b`Y`j`U`i`U`h`c`b`g`h`f`U`H`[`m` GYY`A ccX`Y`Zcf`XYHU]g`cZfYUX]b[#]Yk]b[GYY`A ccX`Y`Zcf`h`hcf]U`XYHU]`
K YY_`%`%`%`(`A`Um!`&`\$`A`Um	@YWh`fY	

| GYY'A ccX`Y`Zcf`h hcf]U`XYHJ]g |

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

GYY`A ccX`Y`Zc`f`fYwta a YbXYX`fYUX]b[``]ghzk YY_!k YY_`fYUX]b[g`fUj U]UV`Y`cb`A ccX`Y`Ug`D8: gkz`UbX
j]XYc`Wcbh`bh

F YWta a YbXYX`F Ygci fWg

h`UXX]hcb`hc`hY`fYgci fWg`bchX`cb`hY`A 8-5`&\$\$*`A ccX`Y`g]hzhY`Zc`ck]b[`ci fbU`g`UFY
fYwta a YbXYX.

- >ci fbU`-`>ci fbU`cZDi V`]WF Y`Uh]cbg`F YgYUfW
- >ci fbU`-`Di V`]WF Y`Uh]cbg`F Yj]Yk