



ARTS5505

DYfgcbU`]gYX`9b[`]g\`@Ub[i U[Y`9b\UbW@a Ybh

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

7 ci fgY`Cj Yfj JYk

`GHJZ`7 cbhJW`i8YHJ`g`

`7 cbj Ybcfg`

BUa Y				

5ggYgga Ybh

5ggYgga YbhHUg_g`

5ggYgga YbhHUg_	K Y][\h	8i Y'8UHŸ	Gh XYbh@YUfb]b[Ci hŸca Yg'5ggYggYX
DYfgcbU`dfc`YWhXYg][b fDD8Ł	' \$i	& #*\$ #&\$%- '%%\$\$'DA	' ž(ž)
Dfc`YWh`c[Vcc_`UbX`ci fbU`	&\$i	&* # \$+ #&\$%- '%%\$\$'DA	%ž&
C fU`DfYgYbhU]cb`!`%\$ a]bi hŸg`	&\$i	\$) # \$, #&\$%- '\$- .\$\$'5A	(ž)
F YZYW]j Y`YggUm	' \$i	\$- # \$, #&\$%- '%%\$\$'DA	%ž&

5ggYgga Ybh8YhU]`g

5ggYgga Ybh%`DYfgcbU`dfc`YWhXYg][b`fDD8Ł

GhUfhXUHŸ. `Bch5dd`]WV`Y

8YhU]`g. `Gh XYbhŸ`XYg][b`hŸY]f`ck b`dYfgcbU`dfc`YWhŸc`UXXfYgg`hŸY]f`ck b`9b[`]g\`Ub[i U[Y`b`b`YXg" `H\Ym
UfY`fYei]fYX`Ÿc`gdYW]mihŸY]f`dYfgcbU`dfc`YWh[cU`žVUW_[fci bXž`a YhlcXž`fYgci fW]gž`dfc[fYgg
a YUgi fYa Ybhž`h]a Y`]bYž`gWYXi `Y`UbX`Ub]W]dUHŸX`ci hŸca Yg" `H\YmbYX`Ÿc`XYj Y`cd`hŸY]f`DD8`VUgYX`cb
fY`Yj Ubh`]h]fU] fY`cZ`hŸY`Z]Y`X`Wc`bW]fbYX" `H\Y`k`cfX`]a]h]g`%`\$\$`Gh XYbhŸ`fYW]j Y`k`f]h]b`ZYXVUW`VUgYX
cb`fi`Vf]W]g".....

5ggYgga Ybh&`Dfc`YWh`c[Vcc_`UbX`ci fbU`

GhUfhXUHŸ. `Bch5dd`]WV`Y

8YhU]`g. `Gh XYbhŸ`fYWc`fX`hŸY]f`YUfb]b[`UW]j]h]Yg`UbX`_YYd`fYZYW]j Y`ci fbU`cb`U`fY[i `Uf`VUg]g`Ug
d`UbbYX`]b`hŸY]f`DD8" `H\YmUfY`fYei]fYX`Ÿc`gdYbX" ` \$`ci fg`cf`a`cfY`Zc`f`hŸY]f`dYfgcbU`dfc`YWh`Gh XYbhŸ
fYW]j Y`k`f]h]b`ZYXVUW`VUgYX`cb`fi`Vf]W]g"

5ggYgga Ybh'`C fU`DfYgYbhU]cb`!`%\$`a]bi hŸg

GhUfhXUHŸ. `Bch5dd`]WV`Y

8YhU]`g. `Gh XYbhŸ`dfYgYbhŸY]f`YUfb]b[`][\`][\h]g`Zca`hŸY]f`dYfgcbU`dfc`YWh`Zc`f`UVci`h`%\$`a]bi hŸg`Ÿc

dYfgcbU`dfc^WUbx`di hUW\]Yj UV`Y`UW]cbg:]b`U`d`Ub`Zcf`h`Y`bYI h`YUfb]b[`ghU[Y``H\Y`k`cfX``]a `]h]g
&\$\$\$"Gh XYbhg`fYW]j Y`k`f]h`b`ZYXVUW_`VUgYX`cb`fi`Vf]Wg``H\]g:]g`h`Y`Z]bU`UggYgga`YbhZcf`Uth`bXUbW
di`fdcgYg"

K YY_-'&- 'i `m!`&	@YWh fY	DfYgYbHhcb`g_]`g/ZbU`fYZYWj Y`YggUm
5i [i gh	Hi hcf]U`	DfYgYbHhcb`fY\YUfgU`
K YY_%.) `5i [i gh!`-	@YWh fY	@YUfb]b[`: Yghj U`!`_YmbchY`gdYYWYg`
5i [i gh	Hi hcf]U`	@YUfb]b[`: Yghj U`!`dUfU`Y`dfYgYbHhcbg`

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

Gh Xmjb[`]b`9b[`]g\.`GhfUfY[`]Yg`Zcf`Gi`WfWgg`]b`<][\Yf`9Xi`Wf]cb`f&\$\$%+£

F YWca a YbXYX`F Ygci fWg

6cc_`-`@YUfbYf`9b[`]g\`f&\$\$%£

6cc_`-`7f]h]Wf`F YUX]b[`UbX`K`f]h]b[`f&\$\$` £

6cc_`-`: cfY][b`@Ub[i U[Y`@YUfb]b[`f%-`-` , £

6cc_`-`@YI`]Wf`=ggi`Yg`]b`@Ub[i U[Y`@YUfb]b[`f%-`-`) £

6cc_`-`<ck`@Ub[i U[Yg`UfY`@YUfbYX`f&\$\$(` £

6cc_`-`:]j`Y`#U`;`c.`HYUW]b[`Dfcbi`bW]Uf]cb`hc`5Xi`hg`f&\$\$-` £

6cc_`-`9ggYbh]U`g`cZ9ggUmK`f]h]b[.`K` \UhA`Uf_Yfg`@cc_`: cf`f&\$\$%+£

6cc_`-`7f]h]Wf`F YUX]b[`UbX`K`f]h]b[`]b`h\Y`8][]h`5[Y`f&\$\$*` £

6cc_`-`HYUW]b[`UbX`F`YgYUfW]b[`GdYU_]b[`f&\$\$%+£

A cfY`fYgci`fWg`UfY`fYWca`a`YbXYX`cb`@Y[`Ubhc`"

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

7ci fgYg`UfY`dYf]cX]Wf`mfYj`]Yk`YX`UbX`ghi`XYbhg`ZfYXVUW_]g`i`gYX`hc`]a`dfcj`Y`h\Ya`":`YYXVUW_]g`
[`Uh\YfYX`Zfca`ghi`XYbhg`i`g]b[`a`m9I`dYf]YbWf`"Gh`XYbhg`UfY`YbWci`fU[`YX`hc`Wca`d`Yh`h\Y]f`gi`fj`Ymg`Vm`
UWfWgg]b[`h\Y`dYfgcbU`]gYX`k`YV`]b_]`]U`h\Y`A`ccX`Y`Wci`fgY`g]h`"

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Hi fb]hb`Gi Va]gg]cb

Ʒmci`YbWci bhYf`U`dfcV`Ya`k`Yb`U`H`Ya`dh]b[`hc`gi`Va`]hmcif`Ugg][`ba`Ybh`h`fci`[`\`Hi`fb]hb`z`d`Y`UgY`
H`Y`d`l`cb`Y`9I`H`fb`U`Gi`ddcfh`cb`-`,`),`"`,`'`,`%`cf`Ya`U]`h`Ya`cb`YI`H`fb`U`H`h`gi`ddcfh`4`i`bgk`"YXi`"Ui`"Gi`ddcfh`
`l`ci`fg`UfY`,`.\$`\$Ua`-`%`\$.`\$`da`cb`k`YY`X`Umg`U`b`X`-`.\$`\$Ua`-`i`.\$`\$da`cb`k`YY`Y`b`X`g`f`l`*)`X`Umg`U`m`Y`U`f`l`"Ʒmci`
UfY`i`b`U`V`Y`hc`gi`Va`]hmcif`Ugg][`ba`Ybh`Xi`Y`hc`U`Z`U`h`k`]h`Hi`fb]hb`mci`a`Um`U`dd`m`i`Z`f`U`b`YI`H`bg]cb`z`Vi`hmcif`
a`i`gh`f`Y`h]b`mci`f`h]W`Y`h`bi`a`V`Y`f`Z`ca`9I`H`fb`U`Gi`ddcfh`f`U`cb[`k`]h`U`b`m`c`h`Y`f`f`Y`Y`U`b`h`X`c`W`a`Y`b`h`g`l`hc`
]b`W`i`X`Y`U`g`Y`j`X`Y`b`W`hc`gi`ddcfh`mci`f`YI`H`bg]cb`U`dd`]W`h]cb"Ʒmci`Ya`U]`9I`H`fb`U`Gi`ddcfh`mci`k`]`
Ui`hc`a`U`h]W`m`f`Y`W`j`Y`U`h]W`Y`h`bi`a`V`Y`f`z`Vi`h]Z`mci`H`Y`d`l`cb`Y`mci`k`]`b`Y`Y`X`hc`g`d`Y`W`Z`W`m`U`g`_`Z`f`cb`Y`
Hi`fb]hb`U`gc`d`fc`j`X`Y`g`i`d`X`U`H`Y`g`i`cb`h`Y`f`g`m`g`h`Ya`g`h`U`h`g`i`cb`H`k`]h`Y`f`"

;`Y`b`Y`f`U`m`z`U`gg`Y`g`g`a`Y`b`h`U`g`_`g`a`i`gh`V`Y`gi`Va`]h`Y`X`Y`Y`W`f`cb]W`m`j`]U`Y`]h`Y`f`Hi`fb]hb`cf`U`A`cc`X`Y`
U`gg][`ba`Y`b`h`-`b`]b`g`h`U`b`W`g`k`Y`f`Y`h`l`g`]g`b`c`h`i`d`c`g`g]V`Y`z`]h`k`]`V`Y`g`h`U`H`X`i`cb`mci`f`W`ci`fg`Y`g`A`cc`X`Y`g`]h`k`]h`
U`h`f`b`U`h]`Y`gi`Va`]gg]cb`X`Y`h]`g`"

:`c`f`]b`Z`c`f`a`U`h]cb`cb`l`ck`hc`gi`Va`]h`U`gg][`ba`Y`b`h`g`i`cb`]b`Y`j`]U`A`cc`X`Y`.\`h`d`g`#`g`h`X`Y`b`h`i`bgk`"YXi`"Ui`#`ack`!
gi`Va`]h`U`gg][`ba`Y`b`h`a`cc`X`Y`"

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

D`U[]Uf]ga `]g`i g]b[`hY`k cfXg`cf]XYUg`cZchYfg`UbX`dfYgYbh]b[`hYa `Ug`mci f`ck b" `hWUb`hU`Y`a Ubm
Zcfa gž`Zca `XY`]VYfUHY`WXYU]b[`hc`UWV]XYbhU`mW`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`
gci fW`cf`i g]b[`ei chU]cb`a Uf_g" `H\]g`U`gc`Udd`]Yg`hc`]a U[Ygž`UfhUbX`XYg][b`dfc`YWgž`Ug`k Y`Ug
dfYgYbhU]cbg`k \YfY`gca YcbY`dfYgYbh]g`UbchYf`g`]XYUg`cf`k cfXg`k]h`ci hW`YX]h`

hUddfcdf]UHY`dUfUd`fUg]b[.`7`Ub[]b[`U`ZYk `k cfXg`UbX`d`fUgYg`k \]Y`a cghmifYU]b]b[`hY`cf][]bU`
ghfi W`i fY`UbX`#`f`dfc[fYgg]cb`cZ]XYUg`cZ`hY`cf][]bU`ž`UbX`]bZcfa U]cb`k]h`ci hUW_bck`YX[Ya Ybh`H\]g`U`gc
Udd`]Yg`]b`dfYgYbhU]cbg`k \YfY`gca YcbY`dUfUd`fUgYg`UbchYf`g`]XYUg`cf`k cfXg`k]h`ci hW`YX]h`UbX`hc
d]YW]b[`hc[YhYf`ei chYg`UbX`dUfUd`fUgYg`]bhc`U`bYk `k \c`Yž`k]h`ci hUddfcdf]UHY`fYZYfYbW]b["

7 c`i g]cb.`k cf_]b[`k]h`chYfg`Vi hdUgg]b[`cZ`hY`k cf_]Ug`U`dYfgcb`g`]bX]j]Xi U`k cf_]7 c`i g]cb`U`gc
]bWi XYg`dfcj]X]b[`mci f`k cf_]hc`UbchYf`gh`XYbhVYZc`fY`hY`Xi Y`XUHYž`cf`Zc`f`hY`di fdcgY`cZ`hY`a

- i bXYfghUbx'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wcdmf][\hžI BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5Ww'dhUV'Y'I gY'cZ I BGK '⇒H'F Ygci fW'g'Dc`]Wm
- VY'Uk UfY'cZh'Y'ghUbxUfXg'cZVY\Uj]ci f'YI dYW'X'cZYj Yfmcby`]b'h'Y'I BGK 'Wca a i b]m
- `cWJh'gYfj]Wg'UbX'j]bZcfa Uh]cb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZh'YgY'UfYUg'k]`VY'ZJa]]Uf'hc'mci ž'ch'Yfg'k]`VY'byk "; U]b]b['U'gc`X'i bXYfghUbx]b['cZU`h'Y fY'UH'X'UgdYW'g'cZ9@G9'k]`Y'd'mci 'a U_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\hfd.##ji V'YWf i \]XYg" \]VfUfm'i bgk "YXi "Ui #' \]gY#JVci h' \]gY](#)

