



ARTS3758

; `cVU`7 \Ub[Y`ϕhYfbg\]d

HYfa `C.bY`#`&\$&\$



7 ci fgY`Cj Yfj JYk

`GHJZ`7 cbhJW`i8YHJ`g`

`7cbj Ybcfg`

B Ua Y	9a Uj`	5j Uj`UVj]m	@cWjhcb	D\cbY
Gi gUbbY`GWa YjX`	g"gwAa YjX`4 i bgk "YXi "Ui	VmUddc]bha Ybh	%, `A cfj Yb 6fck b	Z`*%f&k`-' ,) &(\$)

GWcc``7cbhJW`i8Zcfa Uhjcb

GWcc``cZGcWU`GWYbWg

Fcca`%) -

A cfj Yb`6fck b`7&\$

Ya Uj`.gcgg4 i bgk "YXi "Ui

d\cbY. \$&`-' ,)`% \$+

7ci fgY'8YHJ]`g

7fYX]hDc]bhr`*`

Gi a a UfmicZ\hY'7ci fgY

Gi VYWh5fYU.'9`aTS^6WhWab_ W f

H\]g`Wci fgY'dfcj]XYg'mci `k]h`hY'i b]ei Y`cddcfh b]mhc`[U]b`]bhYfbU]cbU`YI dcgi fY`UbX`XYYdYf
i bXYfghUbX]b[`cZ\hY`dc`]h]W]žgcW]U`UbX`W`h`fU`W`b`hYI hcZU`XYj Y`cda YbhW`b`hYI h`5`][bYX`k]h`I BGK `g
Ya d\Ug]g`cb`k`cf`_]bhY[fU]hX`YUfb]b[ž`h]g`Wci fgY`]g`U`gfh` W`h`fYX`UbX`gi ddcfhX`k`cf`_d`UW`a`Ybh
XYg][bYX`h`c`[]j`Y`mci `dfUW]W]YI dYf]YbW`]b`hUW`_]b[`XYj`Y`cda`YbhW`U`Yb[Yg`h`fci [\`k`cf`_]b[`k`]h`U`bcb!
[cj`Yfba`YbhU`cf[Ub]gU]cb`]b`U`gdYW]Z]YX`Wci b]fmgY]h]b["H\]g`k`]`VY`U`cbY`cZU`_]bX`YI dYf]YbW`h`c`Y`d`
mci `i bXYfghUbX`\ck`dUfh]W]dUrcfmUbX`W`b`hYI h]gYbg]h]j`Y`XYj`Y`cda`Ybhk`cf`_g`]b`dfUW]W`"

7ci fgY`@YUfb]b[`Ci hWca Yg

%`K`cf`_Ug`Ub`]bX]j`]Xi`U`žgY`Za`ch]`U]hX`ž`YUfbYf`]b`U`dfcZ]gg]cbU`dfUW]W`W`b`hYI`h`U]hYbh]j`Y`h`c`h`Y
XmbUa`]W]c`Z`h`Y`]bg]h]h`h]cb`cf`cf[Ub]gU]cb`"
&`F`YZYWhcb`UbX`Yj`U`i`U]h`k`cf`_d`UW`dfUW]W]ž`dfcZ]gg]cbU`XYj`Y`cda`Ybh`UbX`YUfb]b["
`" `7`ca`a`i`b]W]hY`YZYW]j`Y`mUVci`hXYj`Y`cda`Ybh]b`h`Yc`fm`UbX`dfUW]W`V`c`h`c`f`U`m`UbX`]b`U`f`Ub[`Y`c`Z
k`f]h]b`Z`ca`g`"

HYUW]b[`GhfU]h[]Yg`

H\Y`W`b`f`U`W`c`a`dcbYbhicZ\h]g`Wci fgY`]g`U`Z]Y`X`d`UW`a`Ybhk`]h`U`XYj`Y`cda`Ybhicf[Ub]gU]cb`UbX`dfc]]XYg
gh`XYb]h]U`i`b]ei`Y`cddcfh`b]m]h]b]h]bg]j`Y`k`cf`_]b]hY[fU]hX`YUfb]b["

H\]g`Wci fgY`i`gYg`DfcV`Ya`!6UgYX`@YUfb]b[`fD6@k` \]W]`di`hg`h`Y`gh`XYbhU]h`h`Y`W`b`f`Y`c`Z`h`Y`YUfb]b[
`ci`fbYmž`f`Y`ei`]f]b[`h`Y`a`h`c`d`Um`Ub`UW]j`Y`fc`Y`]b`h`Y`YUfb]b[`dfcW]gg`"

H\YfY`UfY`gYj`YfU`fYUgcbg`Zcf`i`g]b[`D6@`]b`h]g`Wci fgY.

h`fYj`c`j`Yg`Ufci`bX`h`Y`gh`XYbh`h`U`D6@Ybj`]f`c`b`a`Ybhgh`XYbh]UfY`dYfgcbU`m`fYgdc]bg]V`Y`Z`f`k` \U]h
h`Y`m`YUfb`"H\Ym]h]U`_Y`dUfh]b`X]g]W`gg]cbgž`g`UfY`_bck`YX[Y`UbX`ž`h`c[Y`h`Y`f`k`]h`h`Y]f`c`ghicf[Ub]gU]cb
Z`ca`i`U]h`mci`f`ck`b`YUfb]b[`cV`YW]j`Yg`"

@YUfb]b[`XmbUa`]W]m`6m]UddfcUW]b[`XYj`Y`cda`Ybhei`Ygh]cbg`]b`dfUW]gYž`gh`XYbh]W]b`Udd`m
h`Y`c`f`Y]h]W]YUfb]b[`UbX`fYZYWhcb`h`Y`YUfbYX`k` \]Y`[U]b]b[`bYk`_g_]`g`"H\Ym]W]b`U`gc`]XYbh]Zm[Udg`]b
h`Y]f`_bck`YX[Y`h`U]h`h`Y`m]W]b`Z`]i`dcb`fYh`fb]b["H\Y`cddcfh`b]m]h`c`fYZYWhcb`h`Y`Z]Y`X`YI`dYf]YbW`
Yb\UbW]g`gh`XYbh]f]U]j]m]h`c`VYW`c`a`Y`Ub`c`VgYfj`UbhW]Ub[YI`dfUW]h]cbYf`"

5Wci]f]b[`g_]`g`Zcf`]ZY.`5b`]bhYbg]j`Y`k`cf`_]YI`dYf]YbW`W]b`dfc]]XY`gh`XYbh]k`]h`h`Y`Z]fgh]Ugh`c`Zk` \U]h]h
a`YUbg`h`c`VY`U`XYj`Y`cda`Ybh]dfcZ]gg]cbU`UbX`[U]b]g_]`g`h`Y`m]UfY`i`b`_Y`m]h`c`UWci`]fY`]b`U`W]Ugg]f`cca
gY]h]b["5`Z]Y`X`
h]b[h]b[h]b[h]b[h]b[W`"

5ggYgga Ybh

D`YUgY`Wcbgi `hiA ccX`Y"

5ggYgga YbhiHUg_g`

5ggYgga YbhiHUg_	K Y][\h	8i Y`8UH`	Gh XYbh@YUfb]b[Ci hWca Yg`5ggYggYX
D`YUgY`Wcbgi f[Ub]gU]cb 5ggYgga Ybhi			

DUfh%`K YY_`mfYZYWj Y`>ci fbU`9bf]Yg`UfY`hc`VY`k f]hYb`cj Yf`hY`Wci fgY`cZ`hY`]bhYfbg\]d`fUVci h) \$\$
k cfXg`dYf`Ybhf`m`g`hUf]b[`]b`K YY_`&`fK YY_`%]g`XYX]WU`hY`X`hc`hY`Zcfa Uhj Y`@YUfb]b[`7`cbhfUW`K`Y
fYW`ca a YbX`hYgY`V`c[g`UfY`k f]hYb`cb`K`cfXDfYgg`f`h`tdg.##`cfXdYgg`W`ca #`k`\\W`U`ck`g`mci`hc`]bj`]hY
Zc`ck`Yfg`"H\]g`a`YUbg`mci`WU`b`g`UfY`mci`f`fYZYW]cbg`fk`]h`UV`]mhc`UXX`d`l`ch`g`k`]h`ZJa`]mUg`k`Y`Ug
hY`Wci`fgY`W`bj`YbYf`"b]`]hY`"gW`a`Y]X`]i`"fB`f`Gi`gUbbY`G`W`a`Y]X`E`hc`mci`f`V`c[""9UW`V`c[`]g`Xi`Y`cb`hY
A`cbXUmcZ`hY`gi`VgYei`Ybhk`YY_"`Mci`cb`m`Uj`Y`hc`k`f]hY`U`hc`U`cZ`*`V`c[g`z`gc`WU`b`U`Z`c`f`X`hc`a`]gg`U`k`YY_
k`\\Yb`mci`UfY`j`YfmVi`gm`

K f]hYb`ZYXVUW`cb`V`c[g`]g`d`fcj`]XYX`k`]h`]b`U`k`YY_`cZgi`Va`]gg]cb"

DUfh&.`I`dcb`W`ca`d`Y`h`cb`cZ`hY`"b`hYfbg\]d`ghi`XYbhg`UfY`hc`W`ca`d`]Y`U`"V`c[g`f`h`ci`UfY`cb`m`U`ck`YX`hc`YX]h
Zc`f`9b[`]g`\\;`fUa`a`Uf`#`G`dY`"b[QUg`U`dc`f`h`Z`"c`"`@`b`]bY`Gi`Va`]gg]cb`j`]U`Hi`fb]h]b`cb`A`ccX`YQ`

K f]hYb`ZYXVUW`UbX`U`bi`a`Yf]WU`" [fUXY`k`]`"VY`d`fcj`]XYX`k`]h`]b`hYb`k`cf_]b[`XUmg`cZgi`Va`]gg]cb"

Gi`Va`]gg]cb`b`chYg`cb`]bY`

Hi`fb]h]b`gYh]b[.`H\]g`Ugg][`ba`Ybh]g`gi`Va`]hYX`h`fci`[`\\Hi`fb]h]b`UbX`gh`XYbhg`WU`b`g`Y`Y`Hi`fb]h]b`g]a`]Uf]m
fYdcfng"

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

H\YfY`UfY`bc`YI dYWX`fYgci fWg`Zcf`ghi XYbHg"

F YWca a YbXYX`F Ygci fWg

D`YUgY`Wcbgi`hA ccX`Y"

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

Gh XYbHg`Wb`i gY`hY]f`V`c[g`fUbx`Ya U]E`hc`dfcj]XY`ZYXVUW`hc`hY`7ci fgY`7cbj YbYf`cb`U`k YY`mVUg]g"
H\YfY`]g`U`gc`Ub`cddcfhi b]miZ`f`cfU`ZYXVUW`Xi f]b[`hY`fYh`fb`XYVf]Y]b[" Gh XYbHg`k]`U`gc`VY`Ug`YX`hc`
Wca d`Yh`U`g`cfhcb`]bY`YI]hgi fj Ymhc`Y`d`i`g`ja`dfcj Y`hY`XY`]j YfmcZ`hY`; `cVU`7`Ub[Y`#hYfbg`d" K Y
\Uj Y`VYYb`VYYb`a`U_]b[`UX`gfa`YbHg`hc`h`g`Wci fgY`VUgYX`cb`ghi XYbhZYXVUW`fVc`h`Wcbh`YbhUbX
UggYgga YbHg`E`m`Uf`UbX`UfY`Wcbh]bi]b[`hc`gf]j Y`hc`ja`dfcj Y`ghi XYbh`YUfb]b[`UbX`YI dYf]YbW"

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 hWYX]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`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 hWYX]hU`bX`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][\hž' 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']bZcfa Uhcb'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 ""

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

5 WUXYa]WbZcfa Uh]cb`

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

- fYei Ygh]ZcfYI hYbg]cb/

