



ARTS2821

7 ca dUfUhj Y`Dc`]h]Wg`UbX`7 c`cb]U`]ga .`DfcW`ggYg`cZ
F Yg]ghUbVW ž`>i gh]W`UbX`HfUbg]h]cb

HYfa `Cby`#`&\$%



GWcc`cZGcWU`GWYbWg`#`I BGK`5ffg`UbX`GcWU`GWYbWg

7ci fgY'8YHJ]`g

7fYX]hDc]bHg`*`

Gi a a UfmicZ\hY'7ci fgY

7c`cb]gU]cb]g]cbY'cZ\hY'a cfY'dYfj Ugj] Y'UbX'YbXi f]b[`gmghY'a g'cZdck Yfz`_bck`YX[Yz`Xca]bU]cb'UbX
gi V^ [U]cb`]bZcfa]b[`VcbHYa dcfUfmiDc`]h]Vg'UbX'`bHYfbU]cbU`F Y'U]cbg" `H\]g`Vci fgY'YbVci fU[Yg'mci `rc
fYZYVhi dcb'UbX'W]h]W`m]bHYffc[UHY'hY'k Umg`]b`k \]WX'dfcW'ggYg'cZVc`cb]gU]cb'UbX'XY!Vc`cb]gU]cb
UZZYVhVcbHYa dcfUfmidc`]h]Vg'fYg]ghUbW'z'fUbg]h]cbz`^ gh]W'z'hY' [`cVU`cfXYf'UbX'`cWU]gYX'UbX' [`cVU`
W\U`Yb[Yg" `b`h]g`Vci fgY'mci `k]`YUfb'UVci h\hY'VcFY'hYcf]Yg'z'VcbW'dhg'UbX'a Yh'cXg'i gYX']b'fYgYUfW
cb'f]dcg]h'Vc`cb]U]ga `UbX'Vca dUfU]j Y'dc`]h]Vg'UbX'Udd'mih]g`_bck`YX[Y'rc'fYU`k cfX'WUgYg"

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

% 8YgW]VY'UbX'Yj U'i UHY'hY'a U]b'hYcf]Yg'z'VcbW'dhg'UbX'dfcW'ggYg'i gYX']b'hY'gh XmicZ
Vc`cb]U]ga `UbX'Vca dUfU]j Y'dc`]h]Vg"
&" 7f]h]W`m]Yi Ua]bY'hY'YZYVh'cZX]ZZYfYbhVc`cb]U`Yi dYf]YbW'g'cb'dfYgYbhXUmdc`]h]W`m]bgh]h]h]cbgž
Yj YbHg'z'UbX'UW'c'fg'f]bW'i X]b[`hY'gY'z']b'bU]cbU'UbX']bHYfbU]cbU'VcbHY'lg"
' " ; YbYfUHY'hYcfYh]W`m[fci bYX'fYgYUfW'ei Ygh]cbg'UVci hVc`cb]gU]cb'UbX'XYVc`cb]gU]cbz'UbX
XYj Y'cd'Ubkg Yfg'rc'fYgYUfW'ei Ygh]cbg'i g]b[`Ya d]f]W`WUgY'gh X]Yg'Vcbg]ghYbhk]h'Vca dUfU]j Y

Hi fb]hb'gYhb[. H\lg'Ugg][ba Ybh]g'gi Va]hX'hfci [\ 'Hi fb]hb'UbX'gh XYbhg'WUb'gYY'Hi fb]hb'ga]'Uf]m fYdcfng"

5ggYgga Ybh&. '9I Ua

GHUfhXUHY. '

8YHU]`g. '&\ci f'k f]hb'YI Ua ']b'hLY'cZ]WU' I BGK 'YI Ua 'dYf]cX"'H\]g']g'hLY'Z]bU'UggYgga Ybh]b'hLY Wci fgY"'Gh XYbhg'k]'fYWW] Y'U'bi a Yf]WU' [fUXY'k]h]b'hYb'k cf_]b['XUm]cZgi Va]gg]cb'hfci [\ 'hLY I b]j Yfg]mf]@YUfb]b['A UbU[Ya YbhGmg]Ya 'f]A GŁ

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

8YHU]`g'UVci h'hLY'YI Ua 'k]'VY'dfcj]XYX'cb'a ccX'Y'WcgYf'hc'hLY'YI Ua 'dYf]cX"

5df]	GYa]bUf	HfUbg]hcbg
K YY_%% '&- '5df]'! '% A Um	GYa]bUf	fGh XYbhtg]b'H\i fgXUmigYa]bUfg \Uj Y'h.Y]f'Z]bU` WUggYg'cb'Hi YgXUmcZh]g'k YY_"Ł

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

5`fYUX]b[g`UbX`chYf`a UHf]U`g`k]`VY`dcghYX`cb`a ccX`Y"

F YWca a YbXYX`F Ygci fWg

5`fYUX]b[g`UbX`chYf`a UHf]U`g`k]`VY`dcghYX`cb`a ccX`Y"

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

H\]g`Wci fgY`i gYg`hY`i b]j Yfg]m]g`A m9I dYf]YbW`dfcWg% Y-`UWci]fY`UbX`fYgdcbX` Y-`ZYXVUW`Zfca
gh XYbtg`UhhY`YbX`cZhY`Wci fgY`"Mci`UFY`j Yfmk Y`Wca Y`UbX`]bj]hX`UhiUbm]ja Y`Y-`gi Va]h]bZ`fa U`
ZYXVUW`gdYW]Z]WY-`]bX]j]Xi U`Yi Y-`f]U`g`UbX`YWci fY% Y-`hY`Wci fgY`Wcbj Yb-`f-`f`mci f`Yi Y-`f"

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

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

Ẓmci `YbWci bhYf`U`dfcV`Ya `k \Yb`U`H`Ya dh]b[`hc`gi Va]hmc`i f`Ugg][ba YbhHfci [\`Hi fb]h]bžd`YUgY
H`Yd\cbY`9I H`fbU`Gi ddcfhcb`-` ,) `` `` ` %cf`Ya U]`H`Ya `cb`YI H`fbU`H`hgi 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`mYUfL` Ẓmci
UfY`i bUV`Y`hc`gi Va]hmc`i f`Ugg][ba YbhXi Y`hc`U`ZU`i`hik]H`Hi fb]h]b`mci `a UmiUdd`miZc`f`Ub`YI H`bg]cbžVi hmc`i
a i ghfYH]b`mci f`h]W`Yhbi a VYf`Zca `9I H`fbU`Gi ddcfhfU`cb[`k]H`Ubmch`Yf`fY`Yj UbhXcW a YbHgE`hc
]bWi XY`Ug`Yj]XYbW`hc`gi ddcfhmci f`YI H`bg]cb`Udd`]W]h]cb" Ẓmci `Ya U]`9I H`fbU`Gi ddcfhmci `k]`

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.

7cdm]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[YgžUfhUbX`XYg][b`dfc`YWgžUg`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`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 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["

7c`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_"`7c`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 bXYfghUjX'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wc'dmf][\hžI BGK 'Gh XYbh7cXY'cZ7cbXi W'UjX'5W'W'dhUV'Y'I gY'cZ I BGK '⇒H'F'Ygci f'W'g'Dc`]W'h
- VY'Uk UfY'cZ'Y'ghUjX'UfX'g'cZVY\Uj]ci f'YI dY'W'X'cZYj Yfmc'bY'j]b'h'Y'I BGK 'W'a a i b]m
- `cW'U'Y'gY'fj]W'g'UbX'j]bZ'c'fa U]cb'UVci hi BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZ'Y'gY'UfY'Ug'k]`VY'ZJa]]Uf'hc'mci ž'c'h'Y'fg'k]`VY'bYk "; U]b]b['U'gc`X'i bXYfghUjX]b['cZU`'h'Y fY'U'Y'X'UgdY'W'g'cZ9@G9'k]`'Y'd'mci 'a U_Y'h'Y'a cgh'cZ'mci f'gh X]Yg'Uhl BGK ""

[\h'c.##j V'Y'W'i \]X'Y'g"\]VfUfm'i bgk "Y'X'i "U'i #' \]g'Y#\]V'c'i h' \]g'Y](#)

5 WUXYa]WbZcfa Uh]cb`

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`hc.

- fYei Ygh]Zcf`YI h`bg]cb/
- `Uh]`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I BGK `<YU`h`UbX`GUZY`midc`]WYg/
- YI Ua]bUh]cb`dfcVWXi fYg/
-