



# ARTS2820

>i ghjVW

HYfa `H\`fYY`##`&\$%-



GWXcc`cZGcWJU`GWYbVWg`#`I BGK ``5ftg`UbX`GcWJU`GWYbVWg



7ci fgY'8YHJ]`g

7fYX]hDc]bHg`\*`

Gi a a UfmicZ`h`Y'7ci fgY

>i ghW`]g`W`bg]XYfYX`Vma`UbrmidYcd`Y`tc`VY`h`Y`Zfghj`]fhi`Y`cZgcW]U`UbX`dc`]h]W]`]ZY""6i`hik`\\Uh]g`↑gh]W3  
5bX`\\ck`]g`]hfYU`]gYX`]b`dc`]h]W]`dfUW]W3`H\\Y`W`ti`fgY`YI`Ua`]bYg`gca`Y`cZ`h`Y`"YUX]b[`"h`Ycf]Yg`cZ↑gh]W  
]b`W`b`h`Ya`dcfUfmidc`]h]W]`h`ci`[`\\h`UbX`h`Y]f`]a`d`]W]h]cbg`Zcf`XYg][`b]b[`dc`]h]W]`]bg]h]h]cbg`UbX`di`V`]W  
dc`]W]Yg""E`i`Yg]h]cbg`]bW]`XY.`K`\\Uh]g`U`Z]f`X]g]f]Vi`h]cb`cZgcW]Y]m]g`fYgci`fW]g3`G`\\ci`X`dUfYb]g`VY`Yb]h]hYX  
tc`dUgg`cb`h`Y]f`k`YU`h`tc`h`Y]f`W]X`fYb3`G`\\ci`X`ci`f`di`V`]Wdc`]W]Yg`hfYUhYj`YfmW]h]nYb`h`Y`gUa`Y`cf`fU`h`Yf  
hU`\_`Y`]b]tc`U`W]W`ti`bh[`YbXYf`UbX`W`h`fU`X]ZYfYbW]g3`K`\\Uh]gYbgY`W]b`VY`a`UXY`cZ`]b]h]f[`YbYfU]h]cbU`

# 5ggYgga Ybh

## 5ggYgga YbhHUg\_g`

5ggYgga YbhHUg_	K Y][ \h	8i Y`8UHŶ	Gh XYbh@YUfb]b[ Ci hWta Yg`5ggYggYX
9ggUm	) \$i	&#/%&#&\$%- `\$( . \$\$`DA	%z&ž(
C b`]bY`HYgŶg`	` \$i	K YY_g`) / `-	`
Hi hc f]U`8]gW gg]cb`	&\$i	5WŵfX]b[ `hc`k YY_`mhcd]W WcgYb	%

## 5ggYgga Ybh8YHJ]`g

### 5ggYgga Ybh%`9ggUm

GHUfhXUHŶ. `Bch5dd`]WVY`

@Yb[ h. `&\$\$\$`k cfXg

8YHJ]`g. `Mci`k`j``gi Va ]hU`&) \$\$`k cfX`fYgYUfW`YggUm`E i Ygh]cbg`UfY`gYhVmihY`Wci fgY`Wcbj Ybcf`Mci k`j``fYW`]Y`k`f]hYb`ZYXVUW`UbX`U`bi a Yf]WU`[ fUXY`k`]h]b`hYb`k`cf\_]b[ `XUm]cZgi Va ]gg]cb`H\Y`ZYXVUW`g\YYhfi Vf]Wk`j``VY`Uj`U]`UV`Y`hc`mci`UhhY`ghUfhcZhY`Wci fgY`gc`h`Uhmci`WUb`k`cf\_`hc`UfXg`gdYW]ZYX`ghU`bXUfXg`H\]g`]g`hY`ZbU`UggYgga YbhZc`f`hY`Wci fgY`"

Hi fb]h]b`gYH]b[ . H\]g`Ugg][ ba Ybh]g`gi Va ]hYX`h`fci [ \`Hi fb]h]b`UbX`gh XYbŶg`Xc`bchgYY`Hi fb]h]b`g]a`]Uf]mifYdcfŶg`"

## 5ggYgga Ybh&`C b`]bY`HYgŶg`

GHUfhXUHŶ. `%ghE i ]n. `k YY\_) ž&bX`E i ]n. `k YY\_`-

8YHJ]`g. `Hk`c`cb`]bY`hYgŶg`f`a`i`h]d`Y`Wc]WŶk`cfh`&\$i`YUW`]b]b`bXYX`hc`hfUW`\_mci`f`Wca`dfY`Ybg]cb`cZ`fYei`]fYX`fYUX]b[`g`UbX`Y`Wfi`fY`a`UHf]U`"F`Ygi`h]g`cZ`hYgŶg`UhhWcbWfi`g]cb`cZ`hYghdYf]cX`k`]h`Wc`fY`Wfi`Ubgk`Yfg`UbX`hc`U`g`Wc`fY`"

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

D`YUgY`bc`hY`h`UhhY`hY`k`Y][`h]b[`[`j`Yb`]b`hY`XgYgW]d]cb`UVcj`Y`cZ&\$i`]g`Ub`Yffc`f`hig`ci`X`fYUX`%)`i`YUW`"K`mbch`ghUa`YbX`hY`&\$i`hc`%)`i`žmci`Ug\_3`9j`Yf`fYUX`?`UZ`U3`"

Hi fb]h]b`gYH]b[ . H\]g`]g`bchU`Hi fb]h]b`Ugg][ ba Ybh

## 5ggYgga Ybh` .`Hi hc f]U`8]gW gg]cb

GHUfhXUHŶ. `Bch5dd`]WVY`

@Yb[ h. `%\$`a`]bi`hYg`cf`gc

8YHJ]`g. `Mci`k`j``bca`]bUH`U`k`YY\_`mh`hc`f]U`hc`d]W`h`Uhmci`k`j``]b]f`c`Xi`W`V`mid`f`Y`d`Uf]b[`gca`Y`W]h]W]ga`c`Z`"

hY`Ugg][ bYX`fYUX]b[ g`UbX`fU]g]b[ `ei Ygh`cbg`Zc`f`WUgg`X]gW`gg]cb": YYXVUU`k ]`VY`[ ]j` Yb`k ]h]b`&k`YY\_g`  
cZdfYgYbHh]cb ]b`hY`Zcfa`cZUb`UggYgga`Ybhfi`Vf]W`.....

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

hY`Zfghh`hcf]U`Zgh`XYbhg`k ]`bca ]bUH`U`k`YY`\_mihcd]Wcb`k`\\]W`h`dfYgYbh`

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

5 hYbXUbW F Yei ]fYa Ybhg

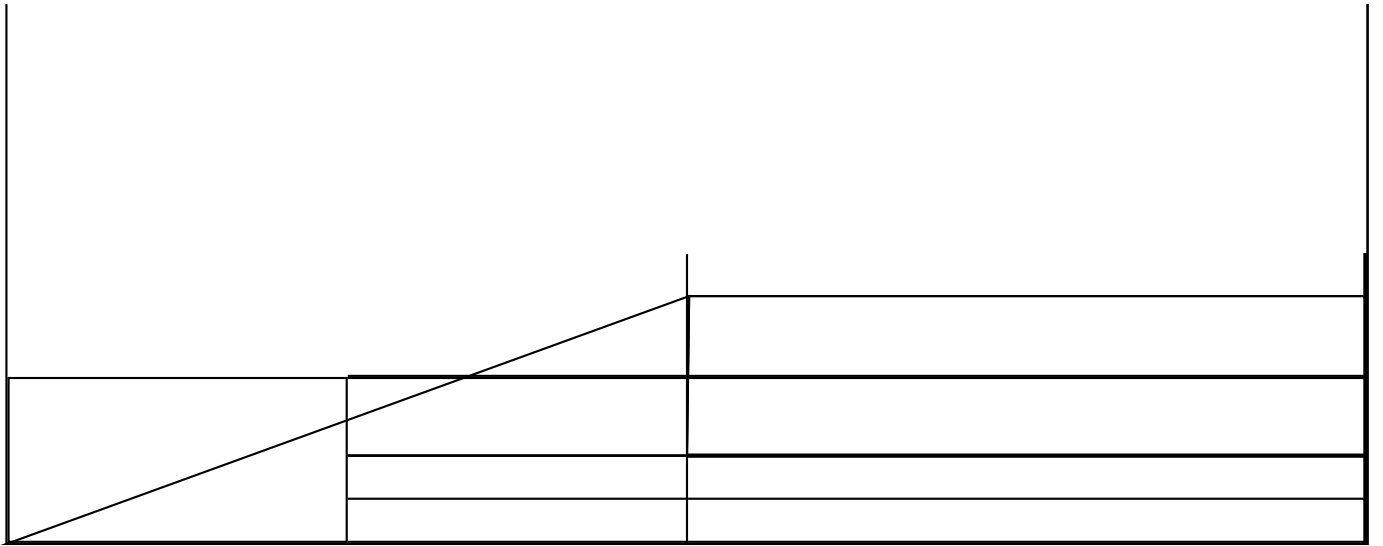
Gh XYbhg UFY ghfcbl mYbWci fU[ YX'hc UHhYbX U''WUggYg UbX'fyj ]Yk ''YWhi fy'fYWc fX]b[ g"

7 ci fgY'GWXYXi `Y

[J \]Yk WUgg'ha YhUVY](#)

H]a YhUV`Y`

8UhY	HmdY	7cbhYbh
K YY_%`%*`GYdhYa VYf! &\$`GYdhYa VYf	@YWhi fy	÷hfcXi W]cb`!`K \Uh]g`>i gh]W3`5bX`>i gh]W`Zcf k \ca 3
	Hi hcf]U`	
	C b`]bY`5W]j ]m	
K YY_&.`&`GYdhYa VYf! &+`GYdhYa VYf	@YWhi fy	÷h`hYfy`Ub`C V`][ Uh]cb`hc`X]Y`Zcf`hY`ghU]Y`cf`hc`f]g_ cbYf]`]ZY`]b`]hg`XYZbW3
	Hi hcf]U`	
	C b`]bY`5W]j ]m	
K YY_`."`\$`GYdhYa VYf! (`C WcVYf	@YWhi fy	7 Ub`\]ghcf]WU`]b`↑ gh]Wg`VY`fYWh]ZYX3
	Hi hcf]U`	
	C b`]bY`5W]j ]m	
K YY_(`.+`C WcVYf!`%% C WcVYf		Di V`]W<c`]XUmi!`Bc`7`UggYg
K YY_)`.%(`C WcVYf!`% C WcVYf	@YWhi fy	<ck`g\ci`X`fYgci fWg`VY`X]gh\$ %o



F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

? UH\Yf]bY`Ga ]hgž3bb\*[\* Y Ba 1f[US^FZWack, ;eegWe S` V 6WfSfWež&bX`YX]hcb"DU`[ fUj Y`A UWá ]`Ubž&\$%\*"
.....

F YWca a YbXYX`F Ygci fWg

BchUj U]UV`Y

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

H\]g`]g`U`bYk`Wci fgY`UbX`]hg`XYj Y`cda Ybhk ]`VYbYžhžca`mci f`Wcbgfi W]j Y`ZYXVUW`"Gh XYbh
Yj U`i Uh] Y`ZYXVUW`]g`[ UH\YfYX`dYf]cX]W]`mi g]b[ žUa cb[ `chYf`a YUbgžI BGK f]g`7ci fgY`UbX`HYUW]b[
9j U`i Uh]cb`UbX`a dfcj Ya YbhdfcWgg" bžcfa U`ZYXVUW`UbX`WUgg! YbYfUH`X`ZYXVUW`UfY`U`gc
]a dcfU]bH`Gh XYbhZYXVUW`]g`fU`Yb`gYf]ci g`mž`UbX`]a dfcj Ya Ybhg`k ]`VY`a UXY`hc`h`Y`Wci fgY`VUgYX`]b
dUfhcb`gi W`ZYXVUW`"G][ b]žW]bhW]Ub[ Yg`hc`h`Y`Wci fgY`k ]`VY`Wca a i b]W]hX`hc`gi VgYei YbhWc`cftg`cZ
gh XYbhg`fU\_]b[ `h`Y`Wci fgY`"



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`m`YUfL` 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 Ybhgk`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 gZ`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[ YgZ`UfhUbX`XYg][ b`dfc`YWgZ`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`i fY`UbX`#`f`dfc[ fYgg]cb`cZ]XYUg`cZ`hY`cf][ ]bU`Z`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`Yz`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`XUHY`Zc`f`Zc`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'5WWhU'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
- `cWWh'gYfj ]W'g'UbX' ]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 ""

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

