

# **ARTS3643**

5XjUbWXKf]h]b[`]b`>UdUbYgY

HYfa 'H\fYY''##'&\$&\$

GW.cc<sup>``</sup>cZ<iaUb]hyg'UbX'@Ub[iU[Yg`'#'I BGK '5fhg'UbX'GcWU''GW}bWg

## 7ci fgY<sup>·</sup>8YHJ]`g

### 7 fYX]hDc]bhg\*\*\*

### Gi a a UfmcZh\Y'7ci fgY

H\]gʻWci fgYʻdfYgYbhgʻUbʻcddcfh b]hriZcfinci hcʻXYj YʻcdʻfYUX]b[ʻUbXʻk f]h]b[ʻg\_]``gʻ]bʻ>UdUbYgYʻk ]h, ʻUʻk ]XY j Uf]YhricZhYI hi[YbfYg"ʻ6m'ZcW g]b[ʻcb``Ub[i U[YʻUbXʻhYI hcf[Ub]gUh]cbʻcZX]ZYfYbhi[YbfYʻhYI hgʻzh YʻWci fgY dfcj ]XYgʻnci ʻk ]h, ʻh\YʻWU`Yb[YʻncʻWfYUhY & f]hYʻnci fʻck bʻhYI hʻc5ʻk ]XYʻfUb[YʻcZ>UdUbYgYʻhYI hgʻk]``VY dfYgYbhYXʻncʻYI d`cfYʻ\ck ``Ub[i U[Yʻi gU[YgʻX]ZYfʻUVWcfX]b[ʻncʻ[YbfY"ʻH\fci [\`[YbfY!VUgYXʻfYUX]b[ʻcZ gYʻYWfYXʻhYI hgžmci ʻk ]``XYj YʻcdʻfYUX]b[ʻg\_]``gžUbX``UhYfʻh\cgY`g\_]``gʻk]```VYʻi gYXʻncʻk f]hY'nci fʻck b >UdUbYgYʻhYI hg"H\Yʻ]bhYbh]cbʻcZh\]gʻWci fgYʻ]gʻncʻZ fh\YfʻXYj Yʻcdʻnci fʻUV¢i ]g]h]cbʻcZUXj UbWfXʻg\_]``gʻ]b k f]h]b["

H\]g`WcifgY`]g`HUi[\hi]b`>UdUbYgY"

### 7cifgY`@YUfb]b[`CiHWcaYg

%" K f]hY`UbX`fYUX`]b`>UdUbYgY`UhUb`UXj UbWYX``Yj Y``VmYI hYbX]b[``h\Y`\_bck`YX[Y`cZ\_Ub'] Wca dci bXgžij cWUVi `UfmUbX`YI dfYgg]cbg"

&" K f]hY`U`bUffUh]j Y`]b`>UdUbYgY"

' "K f]hY`U`fYdcfh`VmYj U`i Uhjb[`U`hcd]WUbX`YI dfYgg]b[`cd]b]cbg"`

("9jU`iUhY`g\_]``g`]b`YjU`iUh]b[ `ckb`dYfZcfaUbWY`]b`kf]h]b[ `UbX`fYUX]b["

### HYUW ]b[ GhfUhy[ ]Yg

H\Y`Wci fgY`]g`HUi [\hVmk UmcZh\fYY`\ci fg`YWfi fY`UbX`cbY!\ci f`h hcf]U``k YY\_`m'` ⊕``YWfi fYgžmci `k ]`` `YUfb`UVci hih\Y`k Y``!\_bck b``]hYfUfmik cf\_`cZh\Y`k YY\_`]b`cfXYf`hc``YUfb`UXj UbWYX``Yj Y`cZj cWUVi `Ufmž`\_Ub^]ž UbX`YI dfYgg]cbg`hc`dc`]g\`mci f`gYbg]hj ]mihc`k f]hYb`hYI hg"` ⊕`h hcf]U`gžmci `k ]``dfUWf]WY`hYI hik f]h]b["`Hc ]a dfcj Y`mci f`k f]h]b[ žmci `k ]``VY`[i]XYX`hc`VYWca Y`Uk UfY`cZmci f`Y i fgh i hcf]U`k YY\_`m

# 5ggYgga Ybh

# 5ggYgga YbhHUg\_g

5ggYgga Ybh'HJg_	K Y][ \h	8iY`8UHY	GhiXYbhi@YUfb]b[ CihWcaYgʻ5ggYggYX
BUffUhjjY`kf]hjb[`	' \$I	%* <i>#</i> %\$#&\$&\$`\$).\$\$`DA	%ž&Ž
Ei]n'	&\$1	Bch5dd`]WUV`Y	%
5bU`mh]WU``K f]h]b[	(\$1	&'#%%#&\$&\$`\$).\$\$`DA	%ž ž(

#### 5ggYgga Ybh' . 5bU`mh]WU`K f]h]b[

GHJfhXUhY.Bch5dd`]WUV`Y

#### 8YHJ]`g.

Mci `WUffmci hfYgYUfW\`cb`U`gY`YWYX`hcd]WUbX`kf]hY`U`fYdcfhfHbX]j]Xi U``kcf\_ž(\$\$\$!)\$\$\$`W\UfUWYfgE" Mci `k]``fYWY]jY`U`fYgi `hUbX`kf]hYb`ZYYXVUW\_"'H\]g`]g`h\Y`Z]bU``UggYgga YbhZcf`UhHYbXUbWY`di fdcgYg"

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

GYY'A ccX`Y'Zcf'XYHJ]`g"

Hi fb]hjb'gYhjb[.'H\]g']g'bchU'Hi fb]hjb'Ugg][ ba Ybh

5ggYgga Ybh (. GY Z 5ggYgga Ybh

GHJfh'XUHY. \*&' #\$- #&\$&\$ \*%&.\$\$ \*DA

#### 8YHJ]`g.

Mci 'UggYgg'mci f`ck b`dYfZcfa UbWY`cb`fYUX]b[``]HYfUWnk cf\_`UbX`HYI hk f]Hjb[`VmfYZYWfjb[`cb`mci f``YUfb]b[ UWfjj ]HYg`f]b`UbX`ci hg]XY`VWggŁžgY`Z`UbX`dYYf!WcffYWfjcbg"`H\]g`]g`\Y`X`Xi f]b[`WUgg`Zcf`)`k YY\_g f%\$a ]bg# YY\_ž&i # YY\_Ł"

Mci `k]```fYWY]jY`U`bi a Yf]WU``a Uf\_"`: YYXVUW\_'j]U`WUgg`X]gW gg]cb"`5XX]HcbU``ZYYXVUW\_`k]``VY`[]jYb i dcb`fYei YgH

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

GYY'A ccX`Y'Zcf'XYHJ]`g"

Hi fb]hjb'gYhjb[.'H\]g']g'bchU'Hi fb]hjb'Ugg][ ba Ybh

### FYgci fWg

#### DfYgWf]VYX F Ygci fWfg

- 6cc\_'-F]gci 'bc'\_c\_i [c'\_mci\_Ug\c'f&\$\$&
- 6cc\_'-'8cfUY'a cb'bc'?Ub')ž'>m \_i [c'c'Hgi \_U]'k U\_Yfi 'f&\$%' Ł
- 6cc\_'! 8cfUY'a cb'bc'Mc']\*↑\_i [c'%\$\$'f&\$%)Ł

#### FYWca a YbXYX FYgci fWYg

F ]\_U]WXUb`\hhdg.##JXXcbg"a cn]``U"cf[ #V#2]fYZcI #JXXcb#f]\_U]WXUb# `\hhd.#k k k "[ Uj c"h'i !hc\_mc"UW?d#c\*UX#d\fUg]b[ #bXYI

\htd.##k k k "[Uj c "h'i !hc\_mc"UW'd#c1UX#dU[Yg# g]b[#d\fUg]b[

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

: cfa U`Yj U`i Uhjcb`k]``VY Wc``YWhYX'j ]U`A m91 dYf]YbWYžUbX'k]``VY'i gYX'hc`]a dfcj Y`Z hi fY`]hYfUhjcbg`cZh]g Wci fgY"'=bZcfa U`žfYU``hja Y`ZYYXVUW\_`]g`U`gc`j Yfmik Y`Wca Yž'Y]h\Yf`]b`dYfgcb`cf`h\fci [\`U`dYfa UbYbhm cdYb`Zcfi a `Zcf`X]gW gg]cb`cZgi [[Yghjcbg`UbX`Wca a Ybhg"

# Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

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

Zmci YbWci bhYf'U'dfcV'Ya 'k \Yb'UhYa dhjb[ 'hc'gi Va ]hmci f'Ugg][ ba YbhN fci [ \ 'Hi fb]hjbžd'YUgY hY'Yd\cbY'9I hYfbU'`Gi ddcfhcb'-', ) '' ' '%cf'Ya U]`'h\Ya 'cb'YI hYfbU'hY'hgi ddcfh4 i bgk "YXi "Ui '"'Gi ddcfh \ci fg'UfY', .\$\$Ua '-'%\$.\$\$da 'cb'k YY\_XUmg'UbX'-.\$\$Ua '-') .\$\$da 'cb'k YY\_YbXg'fl \*) 'XUmg'U'mYUfŁ'' Zmci UfY'i bUV'Y'hc'gi Va ]hmci f'Ugg][ ba YbhXi Y'hc'U'ZJi `hk ]h\'Hi fb]hjb'mci 'a UmUdd`mZcf'Ub'YI hYbg]cbžVi hmci a i ghfYhU]b'mci f'hjW\_Yhbi a VYf'Zfca '9I hYfbU'`Gi ddcfhfU'cb[ 'k ]h\ 'Ubmch\Yf'fY'Yj UbhXcW a YbhgŁhc ]bWi XY'Ug'Yj ]XYbWY hc'gi ddcfhmci f'YI hYbg]cb'Udd`]WUh]cb'' Zmci 'Ya U]`'9I hYfbU'`Gi ddcfhimci 'k ]`` Ui hca UhjWU'`mfYWY]j Y'U'hjW\_Yhbi a VYfžVi h]Zmci 'hY`Yd\cbY'mci 'k ]``bYYX'hc'gdYWJZWU``mUg\_'Zcf'cbY" Hi fb]hjb'U`gc'dfcj ]XYg'i dXUhYg'cb'h\Y]f'gmghYa 'gfUh'g'cb'Hk ]hYf"

; YbYfU``mž'UggYgga YbhHUg\_g`a i ghVY`gi Va ]HYX`Y`YWfcb]WU``mj ]U`Y]H\Yf`Hi fb]h]b`cf`U`A ccX`Y Ugg][ ba YbH'`=b`]bgHUbWfg`k \YfY`H\]g`]g`bchdcgg]V`Yž`]hk ]```VY`gHUHYX`cb`mci f`Wci fgY**'**g`A ccX`Y`g]HY`k ]H\ U`HYfbUh]j Y`gi Va ]gg]cb`XYHU]`g"

: cf`]bZcfa Uh]cb`cb`\ck `hc`gi Va ]hUgg][ ba Ybhg`cb`]bY`j ]U`A ccX`Y.`\hhdg.##gh XYbh'i bgk "YXi "Ui #\ck! gi Va ]hUgg][ ba Ybha ccX`Y

# 5WUXYa ]W<cbYghmUbX`D`U[ ]Uf]ga

D`U[]Uf]ga `]g`i g]b[ 'H\Y`k cfXg`cf`]XYUg`cZcH\Yfg`UbX`dfYgYbH]b[ 'H\Ya `Ug`mci f`ck b"`=h\Wb`HU\_Y`a Ubm Zcfa gžZīca `XY`]VYfUHY`W\YUH]b[ 'hc`UWV]XYbHU``mWcdm]b[ 'Zīca `U`gci fW'`k ]H\ci hUW\_bck `YX[ Ya YbH'

I BGK '[fci dg'd`U[]Uf]ga ']bhc'h\Y'Zc``ck ]b[ 'WUhY[cf]Yg.

- i bXYfgHJbX'mci f`f][\hg`UbX'fYgdcbg]V]`]h]Yg`Ug`U`ghi XYbh'Uh'I BGK
- VY Uk UfY cZdU[]Uf]ga žWcdmf][ \lbzi BGK Ghi XYbh7 cXY cZ7 cbXi Wh0bX 5WW/dhUVY I gY cZ I BGK '=7 H'F Ygci fW/g'Dc']Wh
- VY Uk UfY cZh Y gHUbXUfXg cZVY Uj ]ci f YI dYWYX cZYj YfmcbY ]b h Y I BGK Wca a i b]m
- `cWUHY`gYfj ]WYg`UbX`]bZcfa UH]cb`UVci hI 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 bXYfgHJbX]b[`cZU``'h\Y fY`UhYX'UgdYWfg'cZ9@=G9'k]``\Y`d'mci 'a U\_Y'h\Y'a cghcZmci f`ghi X]Yg'Uh'I BGK "' <u>\hhd.#gi VYWf[i]XYg'`]VfUfm'i bgk "YXi "Ui #Y`]qY#UVci hY`]qY</u>