

JYSçãÑÑ s ys-vÑÓ yÓ ÓÑÑ SéÑÑ Ó ú Ó ¼Ó

50;~ Õ , K} c +-±P B² ELN =y• Ô c 2(4 @@@Î

@ãî4. w le { w 9 wK •

%-D GT " 7W " K•>->-¶ œ@B! @o

...œ@Áµ &P B² ELN =y• B²&ðB , p Õg+-±E !AE€&N =yÕ , 6! D'8 h+-±@o wý ' - .ú,! Ô
E =yÕ , úNµ+-±P B² ELN =y• Ô c 2(4 @@@Îæ" NÁu w /ø³ P B² ELN =y• Õ , úNµÔ c +-±
Õ È " N , wE Õ)³ Õ , Ô c +-±ã . æ/8 &c ; wW*U3i T¹ N , - E Ô c æ" wE@ðB' Õ , A
E =yÔ c &AŽÈ - wû59U Õ , Ô c C Z B' / 3 Ô c w "µK' Õ , C CW w '³ P B² EL
N =y• Õ , Ô c +-±Ô c 2(4 4 ± - ; wE@ð , LO¹@i³ Õ , Ô c • µ 6 µª +-±C CW T6* w0;~ ...U
!A Õ Õ È : -> Ç T 2MM =y• ELÓ' (Ý| # wÕ , Ô c 2(4 7 E/ Á] A0; N =yP Ó @î
& Õ , 4 +-±C CW Ô c 2(4 µ 6 µª +-±Q@y T

œ@| œ@ÚP B² ELN =y• B²&ðB , p Õg Õ , úNµ - E Ô c
Z + 31" \$ Á .@ " Žœœœœ' ([4 - . Áœœœœ' 0 4C\$ ÁB!!!K@% @! B o! Bk! xBk@

œœK¼mP B² ELN =y• UB²&ðB , p Õg & K_ Ñ & h) 7W0v J[- \ +-±@-a "P B² ELN =y• -
ø >,m " • C æ> p , " 1 * ,%4 \ Õ³ P B² EL
" • +-±\$Ag O¹@î? "4» * Õö•êö 1 /§ È È O¹Ñ
u ; \ Õ³ î Kßö P B² ELN =y• \$Ag O¹@îÈ O¹
÷ ; 4 - , +-±P B² EL " • %@öü o¹ P B²
EL€ (@î? %@îü o¹%ü ' ([Z ,8 ' "P B²
ELN =y• UE =y\$Ag O¹@N =yA O¹# " TF*Fô*U
C CW ó f E€+-±æ" , u E@ðè 3i @@@î P B²
ELN =y• N =y+-±' ó f E€' £ ' ó f E€\$ B²&ðB
, p Õg,% %Ž # - E !A \ Õ+-±Õ , /Ä &h
>ÿ C @B• ÷P Ó80! 0v "O¹@îg Ô c 2(4
L-C CW ó f E€4 " p ' ,%Á+-±Ô c # ¼ %
E .ú æ" Ô c 2(4 @@@Î- , " @» È (Ý %s \ € ...
UB²&ðB , p Õg Õ È N =y• KhÈ &T!A ó Ó C
"GEM= ' ó f E€Õ , CD° T " 7 B² B²&ðB
, p Õg E !AE€ Õ+-±Dæy " - Ä&ðB , p Õg
" • e%æ~ %%%
, z " * ² C " 52UP B² ELN =y• -A/£ æL•
TF*50;~B²&ðB , p Õg & h>ÿ+-±3ÓE" ÷N =y
• 7 C@+A Õ : -> Ç T "- , Ô c 2(4 @@@ÎA/£ ý
' P 1ëÓ , . Ô c 1 µ & : -> Ç T +-±Q@y Ô c 0v Ô

c æ" %K • 0v 00µ &B²&ðB , p Õg %o# &
h>ÿ+-±3ÓE@o "ý ' P B² ELN =y1ë3ó , . Ô c
æ" %' ([K'Û0;-N =y• N , : -> Ç T ÷ f
T ž ú "3 X@@@i³ P B² ELN =y• +-±Q@y Ô c • "
@P B² ELN =y• U Ÿ • Ž # 8+-± , . Ô c 1ë
Ó %' ([K Õ P B² ELN =y• 3â> N , 8 %oü
DÀ' ù DÀ' 2(4 "3 X V*U t Kz7b¹ !æK - Ó %og
DÀ' FÜ@@@P B² ELN =y• +-±P Ó¹ ELÓ Ô c 2(
4 "£ Í 650;~ p Õg %æ~ %o+-±3ÓEŽ # %Q £
\ 50;~B²&ðB , p Õg E !AE€ & Õ , +-±3ÓEŽ ú
E =yÔ c 2(4 @@@ÎA/£ +-±' ([µ > %
µ &P B² ELN =y• B²&ðB , p Õg & E !AE€
L< e | LE - K MÄ'ý ' - .ú,! ÔE =yÕ , úNµ!
Ò C WÕ , 4 +-±Ô c æ" " !ª] \$ B²&ðB
, p Õg+-± %Ž # %NÁu ' /ø³ P B² ELN =y•
Õ , Ô c +-±Õ È " N , " Õ)³ Õ , Ô c +-±< • Õ
3i T C ME?* • %&c ; "V*U3i T¹ N , - E Ô c
æ" wE@ðB' Õ , A E =yÔ c &AŽÈ - "U Õ ,
Ô c C Z B' / 3 Ô c " "µK' Õ , C CW " £
4 '³ P B² ELN =y• Õ , Ô c 7 Õ Oœ£ 4 ± %
- ; "E@ð , LO¹@i³ Õ , Ô c • µ 6 µª +-±C CW
T6* "50;~ ...U!A Õ &Õ È : -> Ç T 2M) f N =y

ELÓ' (Ý | # " Õ, Ô c 2(4 7 E/ ÁA0i N=y
 P Ó @i& Õ, 4 +±C CW Ô c 2(4 x 6 μ a
 +±Q@ÿ T %

ÓP B² ELN=y • Õ È " N,

P B² ELN=y • +±A Õ C • - + β m.g %



+ βæP B² ELN=y • !A Õ C •

P B² ELN=y • Fô*U ..." ∈ ±, "B²&ðβ, p
 Õ g g M'8 E !A " t k 7bFô*U • e <!A Õ 0 m %
 P B² ELN=y • 3â>EÆ Õ È " N, - 8 â

$$m \frac{v}{t} = P \dot{\theta} \alpha - X - mg \Rightarrow \theta$$

$$mv \frac{\theta}{t} = P \Rightarrow X + Y - mg \dot{\theta} \theta$$

$$J_z \frac{\omega_z}{t} = M_z$$

$$\frac{\lambda x}{t} = v \dot{\theta} \theta$$

$$\frac{\lambda y}{t} = v \Rightarrow \theta$$

$$\frac{\lambda \theta}{t} = \omega_z$$

ææâ>EÆ > È 0i> È 1 È- » h>ÿ &

Û#>ÿ 0B • ÷ 7b| >ÿ+±A Õ N, g â

$$C_D = \beta \rho v^2 \alpha - \beta \rho v^2 \beta -$$

$$\alpha! \quad 0 \beta \text{MadD} + ! !! \beta " \beta \text{Ma} \frac{1}{4} \alpha +$$

$$\alpha! !! \beta " \beta \text{Ma} \frac{1}{4} \beta + ! ! " \quad 0 \text{Ma}^0$$

$$C_y = ! !! " - ! !! ! \beta 0 \text{Ma} + ! \beta \times \beta \times +$$

$$\alpha! !! \times \text{0} \alpha^0 - ! !! \beta \beta " \text{Ma} \frac{1}{4} \alpha + ! \beta \beta " \delta_z +$$

$$\alpha! !! \alpha \frac{1}{4} \delta_z - ! ! \beta \quad 0 \text{Ma} \frac{1}{4} \delta_z$$

$$C_{m_z} = - ! ! 0 \quad \alpha - ! !! \quad \alpha^0 +$$

$$\alpha! !! " \quad 0 \text{Ma} \frac{1}{4} \alpha - ! ! \times " \quad 0 \delta_z -$$

æ! !!! " α ¼δz + ! !!! @x" Ma ¼δz %00
 ææE00(• è4 æ" " &P B² ELN=y • 3â> Õ
 È " N, E=y < • Õ3i T C F Ä â

$$\frac{\lambda^0 \theta}{t^0} + a_\beta \frac{\lambda \theta}{t} + a_\alpha \alpha = - a \delta_z$$

$$\frac{\lambda \theta}{t} - a_x \alpha = a \delta_z \quad \%00$$

$$\theta - \theta - \alpha = !$$

$$\langle Z " a_\beta = - M_z^{\omega_z} / J_z " a_0 = - M_z^{\alpha} / J_z " a = - M_z^{\delta_z} / J_z " a_x =$$

$$\%0 + Y^\alpha \sigma \%0 V o " a_x = Y^{\delta_z} / \%0 V o g \quad \tilde{\omega} \tilde{E} " 2(\cdot \%0$$

$$' " \quad 3 \tilde{\omega} \tilde{E} " N, = \cdot g = \tilde{a} . \quad \frac{\alpha}{8} \cdot <$$

$$\begin{bmatrix} \dot{\omega}_z \\ \dot{\alpha} \end{bmatrix} = \begin{bmatrix} - a_\beta & - a_0 \\ \beta & - a_x \end{bmatrix} \begin{bmatrix} \omega_z \\ \alpha \end{bmatrix} + \begin{bmatrix} - a \\ - a_x \end{bmatrix} \delta_z \quad \%0x0$$

æææ*U!A Õ) • =.g" >D00a 6

$$n_y = \frac{qs C_y^\alpha}{mg} \alpha \quad \%00$$

< Z " C_y g) f t È2(• & h>ÿ+±|) • %3 %00

< ' %0x0 < Ä] f ∈ >ÿELÓ ω_z 1 " >

D00a n_y g 'ã . +±ÿ+±ã . æ/8

$$\begin{bmatrix} \dot{\omega}_z \\ \dot{n}_y \end{bmatrix} = \begin{bmatrix} - a_\beta & - \frac{mg}{qs C_y^\alpha} a_0 \\ \frac{qs C_y^\alpha}{mg} & - a_x \end{bmatrix} \begin{bmatrix} \omega_z \\ n_y \end{bmatrix} + \begin{bmatrix} - a \\ - \frac{qs C_y^\alpha}{mg} a_x \end{bmatrix} \delta_z$$

%00

æææ 7W) f +± Õ, @ ðÄ TM < g

$$q = \frac{\rho v^0}{0} \quad \%00$$

æææ & %00 < E=y Û 3 Ä

$$\dot{q} = \frac{\beta}{0} \rho v^0 + \rho v v \quad \%00$$

æææ B ' >H & %00 < E=y • Ä

$$\dot{q} = \frac{\beta}{0} \rho \frac{dH}{dH dt} v^0 + \rho v v \quad \%00$$

æææ f > 4 ó T !A ó Õ +± @ ðÄ TM < 6

$$\rho = \beta 00 "^{-\beta H} \quad \%00$$

< Z " β = β !!" & ρ E=y!o) Ä

$$\frac{\dot{\rho}}{\rho H} = - \beta 00 " \beta^{-\beta H} = - \beta \rho \quad \%00$$

æææ P B² ELN=y • +±P ÓDÿ Õ " æ/8 g

$$\frac{\lambda H}{t} = v \Rightarrow \theta \quad \%00$$

*^ %00 < Ä â

$$\dot{v} = \frac{P \dot{u} \alpha - X}{m} - g = \vartheta \quad \%B o$$

$$\dot{\theta} = \frac{P \varphi + Y}{mv} - \frac{g \dot{u} \theta}{v} = \frac{g}{v} \left(\frac{P \varphi}{mg} + n_y - \dot{u} \theta \right) \quad \%B \times o$$

ææ3 %B3o2%B o < ' %o o < Ä

$$\dot{q} = -q \left(\left(\beta v + \frac{Q}{v} \right) \vartheta + \frac{0 X}{v m} \right) \quad \%B" o$$

ææEÖ(• è4 æ" " & %Bx o & %B" o < E =y <

• Ö3i T C " Ä] Ö, ' ä . æ/8

$$\begin{bmatrix} \mu_j \\ \mu_\theta \end{bmatrix} = \begin{bmatrix} -\frac{Q \vartheta}{v} - q \left(0 \frac{g}{v} + \beta v \right) \dot{u} \theta \\ \frac{g \vartheta}{v} \end{bmatrix} \begin{bmatrix} \mu_j \\ \mu_\theta \end{bmatrix} +$$

$$\begin{bmatrix} -\frac{Q q C_x^\alpha}{v C_y^\alpha} \\ \frac{g}{v} \end{bmatrix} \mu_{n_y} \quad \%B o$$

< Z " C_x^\alpha g) f Kh È2(• & h > \ddot{y} \pm |) • %5• /ø

%o o < ; Ö, ' ä . æ/8 " Ä] P B² ELN =y• Ö

, Ô c ' ä . æ/8 - 8 ä

$$\dot{x} = Ax + Bu$$

$$y = Cx + Du \quad \%B \times o$$

< Z " ä . > F\u x = [\omega_z \ n_y \ \theta \ q] " Ô c > F\u u =

\delta_z "DÀ' > F\u y = x = [\omega_z \ n_y \ \theta \ q] %£ Z2(• - Kbg

$$A =$$

$$\begin{bmatrix} -a_B & -\frac{mg}{q_1 s C_y^\alpha} a_0 & ! & ! \\ \frac{q_1 s C_y^\alpha}{mg} & -a_x & ! & ! \\ ! & \frac{g}{V_1} & \frac{g \vartheta_1}{V_1} & ! \\ ! & -\frac{Q q_1 C_x^\alpha}{V_1 C_y^\alpha} - q_1 \left(0 \frac{g}{V_1} + \beta V_1 \right) \dot{u} \theta_1 & -\frac{Q \vartheta_1}{V_1} & ! \end{bmatrix}$$

$$B = \begin{bmatrix} -a \\ -\frac{qs C_y^\alpha}{mg} a_n \\ ! \\ ! \end{bmatrix} \quad "C = \begin{bmatrix} \beta & ! & ! & ! \\ ! & \beta & ! & ! \\ ! & ! & \beta & ! \\ ! & ! & ! & \beta \end{bmatrix} \quad "D = \begin{bmatrix} ! \\ ! \\ ! \\ ! \end{bmatrix}$$

ææÇ v "x F\u æ/8 g

$$z = q = Hx \quad \%B o$$

< Z " H = ! æ! æ! æ\B ò%

#‡ P B² ELN =y• Ö, Ô c2(4 @@I

P B² ELN =y• Ö, Ô c2(4 @@I±, ±±\ - Ä) f ÈKrN =y Ö, 6* L ELI è-)] C CWÖ, 4

" %q - q o ! %Ç v Ö, C CW g

$$e = z_c - z = q_c - q \quad \%B o$$

< Z " q_c g Ö, 4 %g - Ä P B² ELN =y• Ö,

Ô c2(4 6* L È(Ý & Ö, ±± L† C CWL- U - E

Ô c2(4 Z B' Ö, ±±/ 3(Ü7 "g ' B' - WÝ

±±ä . F\u e_l "Ç v Ö, 4 C CW / 3 g

$$e_l = \ddot{u} \quad \%B o$$

t ÇP B² ELN =y• ±±Ö, 4 g - 4@ \$ " &

ì Ô c & Äžx = [\omega_z \ n_y \ \theta \ q] E =y È - "3 Ö,

4 C CW e & Ö, 4 C CW / 3 e_l È - %o

g'ä . > F\u "Ä] È - ; ±±ä . æ/8 g

$$\dot{x}_B = A_B x_B + B_B u$$

$$y_B = C_B x_B \quad \%B \times o$$

< Z " ä . > F\u x_B = [\omega_z \ n_y \ \theta \ e \ e_l] "DÀ' >

F\u y_B = [\omega_z \ n_y \ \theta \ e \ e_l] "È - ; ±±2(• - Kb3

X g

$$A_B =$$

$$\begin{bmatrix} -a_B & -\frac{mg}{q_1 s C_y^\alpha} a_0 & ! & ! & ! \\ \frac{q_1 s C_y^\alpha}{mg} & -a_x & ! & ! & ! \\ ! & \frac{g}{V_1} & \frac{g \vartheta_1}{V_1} & ! & ! \\ ! & -\frac{Q q_1 C_x^\alpha}{V_1 C_y^\alpha} - q_1 \left(0 \frac{g}{V_1} + \beta V_1 \right) \dot{u} \theta_1 & -\frac{Q \vartheta_1}{V_1} & ! & ! \\ ! & ! & ! & \beta & ! \end{bmatrix}$$

$$B_B = \begin{bmatrix} -a \\ -\frac{qs C_y^\alpha}{mg} a_n \\ ! \\ ! \\ ! \end{bmatrix} \quad "C_B = \begin{bmatrix} \beta & ! & ! & ! & ! \\ ! & \beta & ! & ! & ! \\ ! & ! & \beta & ! & ! \\ ! & ! & ! & \beta & ! \\ ! & ! & ! & ! & \beta \end{bmatrix}$$

ææg³ @P B² ELN =y• Ö, Ô c2(4 U Ö,

1è- C CW ±ò â 8 "m ' ±±7b | F\u j 6* < " ' "

ý ' 83i T¹ N, - ET6* 4 4 * •

$$] = j = \ddot{u} e Qe + u Ru Wt \quad \%B o$$

< Z "A í p- KbQ !" Ô c FÜí p- KbR >
 !%3i T 1 N, - E Ô c ±±, ±±\ lo? - E Ô c
 u^M " - Ä2(4 ±±1 N, T6* 4 4 * • ® < i %'
 # - E? & Á±±Û 3SûŽ ý æ/8 g

$$A_{\beta}P + PA_{\beta} - PB_{\beta}R^{-\beta}B_{\beta}P + Q = \%0 o$$

æædo? - E Ô c ±±SûŽ ý æ/8 " 4 ' \$ BàA

T6* 4 4 g ® < i ±± ÂP• - E Ô c? g

$$u^M = \delta_z = -Kx_{\beta} = -K \begin{bmatrix} \omega_z \\ n_y \\ \theta \\ e \\ e_l \end{bmatrix} \quad \%0 \times o$$

$$\langle Z "K = R^{-\beta}B_{\beta}P \%$$

&DÀ' æ/8 E = y} 4 • Ä

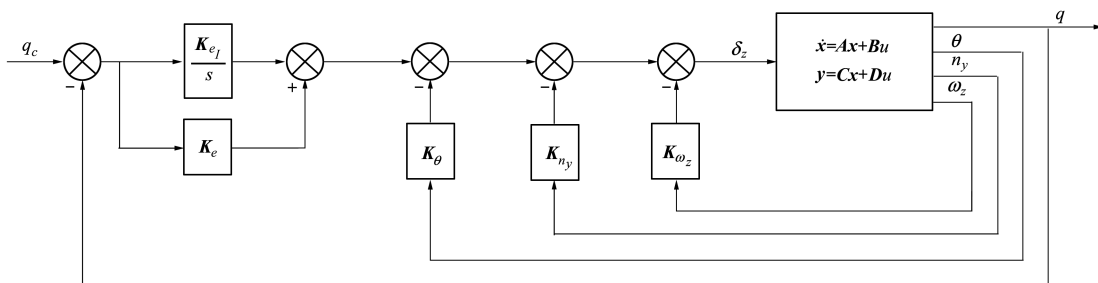
$$x_{\beta} = C_{\beta}^{-\beta}y_{\beta} \quad \%0" o$$

$$\langle Z "C_{\beta}^{-\beta} = C_{\beta} = I \% \quad ' \quad 3'ã . \acute{u} N\mu D^T C g D\grave{A}'$$

ú Nµ6

$$u^M = \delta_z = -Ky_{\beta} = - \begin{bmatrix} K_{\omega_z} & K_{n_y} & K_{\theta} & K_e & K_{e_l} \end{bmatrix} \begin{bmatrix} \omega_z \\ n_y \\ \theta \\ e \\ e_l \end{bmatrix} \quad \%0 \times o$$

P B² ELN = y • Ö, Ô c 2(4 4 ± ± + 0 m.g %



$$+ 0æP B² ELN = y • Ö, Ô c 4 ± ± s +$$

ú± P B² ELN = y • Ö, Ô c 2(4 T6*
 , ,L

t @P B² ELN = y • B²&ðß, p Ö g %æ~ %0
 # N = yP Ó H %00 '] " N = yELÓ Ma %! Ž' B²&ðß,
 p Ö g %0# Ö, Dæy g ! M' êU Ö, ±±Dæy K¼
 , mO B' • ±±t P 59 ü < " ' Ö, 4 \ - Ž)3
 ±± 3i %UA N = y Ž # 8 " P B² ELN = y • Ö È "
 N, g

$$A_{\beta} =$$

$$\begin{bmatrix} -! 0x \times & ! 0 0 \times & ! & ! & ! \\ ! x'' & - ! 0! \beta & ! & ! & ! \\ ! & ! !! & - ! !! 0 & ! & ! \\ ! & " 0" \textcircled{R} & - 0\beta " 0 & ! !! 0 & ! \\ ! & ! & ! & \beta & ! \end{bmatrix}$$

$$B_{\beta} = \begin{bmatrix} -x\beta 0 0 \beta \\ ! \\ ! \\ ! \\ ! \end{bmatrix} \quad " C_{\beta} = \begin{bmatrix} \beta & ! & ! & ! & ! \\ ! & \beta & ! & ! & ! \\ ! & ! & \beta & ! & ! \\ ! & ! & ! & \beta & ! \\ ! & ! & ! & ! & \beta \end{bmatrix}$$

$$\text{ææE6} - E Ô c Í p KbQ "R^{-\beta}$$

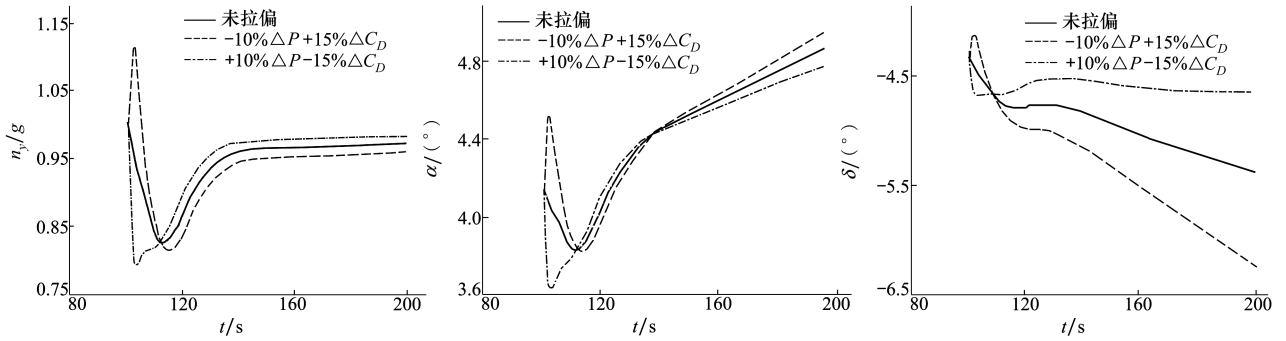
$$Q = \begin{bmatrix} \beta! & ! & ! & ! & ! \\ ! & \beta! & ! & ! & ! \\ ! & ! & \beta! & ! & ! \\ ! & ! & ! & \beta & ! \\ ! & ! & ! & ! & 0 \times \beta!^{-x} \end{bmatrix} \quad " R = \beta \times \beta! "$$

f > æ/8 %0 o" lo Ä - E Ô c KbK^{-\beta} = \beta
 m.g %

$$A = \begin{bmatrix} -! 0x \times & ! 0 0 \times & ! & ! & ! \\ ! x'' & - ! 0! \beta & ! & ! & ! \\ ! & ! !! & - ! !! 0 & ! & ! \\ ! & " 0" \textcircled{R} & - 0\beta " 0 & ! !! 0 & ! \end{bmatrix}$$

$$B = \begin{bmatrix} -x\beta 0 0 \beta \\ ! \\ ! \\ ! \\ ! \end{bmatrix} \quad " C = \begin{bmatrix} \beta & ! & ! & ! & ! \\ ! & \beta & ! & ! & ! \\ ! & ! & \beta & ! & ! \\ ! & ! & ! & \beta & ! \\ ! & ! & ! & ! & \beta \end{bmatrix}$$

ææE - ; ±±2(• - Kb g



æææææ+ ß! æN =y" >Dðª 3ì æææææææææææ+ ßæN =y h>ÿ 3ì + ßæN =y 7b| >ÿ 3ì

ææû , ,L4 É ,8 ' "P B² ELN =y• Õ , Ô c2(4 U ...UB²&ðß , p Õ g Õ È µP %MS! . | 1! A ÕKhÈ µC_D %MS" . | +±ò â 8 "ú&æ* L È (Ý & Õ , 4 ±± L† C CV%oi + @b%' C "Fô*U Õ , Ô c ") f È(ÝP Ó ; ELÓ+±7 E/ ÁA07" €B²&ðß , p Õ g Õ È • ö | ß! . # A!A ÕKhÈ BLö | qß" . # ") f ±±N =yELÓO"ß" • ! ' ó Ž # ±±O"ß" • È T3Ó! Ž Ma" + m.g "59N =yP ÓG7 ÕYP 3Ó! Ž"] @N=y• Õ , : + m.g %9)3 €B²&ðß , p Õ g Õ È ...UBL ß! . | A!A ÕKhÈ • ß" . | # ") f ±±N =yELÓ! ' ó Ž # { 3Ó! Ž Ma" ' # ") f G7 ÕKz{ N=y P Ó! Ž"] " @B²&ðß , p Õ g ±±• e %oŽ # %+ ß! ; + ß3 X4 ' ³ .ú Ž # 8) f " > Dðª¹ h>ÿ 3ì " + Z p Õ g BLö | Ž # 8) f ±± h>ÿD° < " " >Dðª¹ ; D°T " £ Ì \ *^ » BLö | #

N =y• ±±O"ß" • < ") f ±±" > È2(• K!O"ß" ±± ü <59 È T BB±±%+ ß04 ' .ú Ž # 8) f ±± t Kz7b| >ÿ 3ì ") f U ö | Ž # 8 *U7bFÜD° < " 7b| >ÿt T » q@%

¼4 ‡ @ç

Y ' µ & P B² ELN =y• B²&ðß , p Õ g E !A E€& Õ , 3ÓE±K MÄ"ý ' ³ - .ú ,! Õ &N =y Õ , E =yK (Ü Õ c2(4 @ @Íæ" " € ...U p Õ g Õ È0v : -> Ç T 2M"BB±N =yELÓ C # " Õ , Ô c2(4 6* L7 E/ Á] A0; N=yP Ó " È(Ý & Õ , 4 ±± 1ë-> C CWû59 @i³ U ...U : -> Ç 2M# "B²&ðß , p Õ g ±± L • %%, ,L4 ÉO¹@'A æ" ±± • -> T %

ï 50´ ([Å

ßÖæ. @¶ . i ê • ö / Åyö" çX @_ • Ž • æ = Ž üæ çw@fq ç • ç± Uç ; i qLü AEd± è ðdw wLç ; ç wüi çwLç ; Öæöçö è ðdw wçk • ç! ç çù " 0! ß" ÖU U" i 0ÖæK • " » ¼ " !e { Že!A < P B² ELN =y• Õ c - \ XÖŽ-¶ á>-D GT " ' 'u.k " 0! ßx _ö¶ . = " _ üç! çk" èö¶ _ • çkdüLŽö-æç Uu±çk @fq ç • ç± AEd± • çw çüç • kf XÖŽi =Öç " ¶ • æd wç è • fK wüç±U ç± ç ±f èç " 0! ßx %æ dç o ÖæK 1 1 " K • ŽP B² ELN =y• ±±7 Ä • Õ c • @ @Í . ÖŽ@ÐÄg "x Fü ; Õ c " 0! ß0" 0! %oâß ! @K ! _ö¶ >=çæç" _ö¶ . = Žöüwü Õ = wüçLç • ¼üwç ; çw Õ çç! ç ç@fq ç • ç± AEd± . ÖŽ • ç qüwç X Uüç] çwLç • çw " 0! ß0" 0! %oâß ! @K ! %æ dç o xÖæÇEz • " K • Žf TP B² ELN =y• ' N ÷ 1ë3ó , . Õ c . ÖŽ´ 7W" Õ " 0! ß3" 0%oâß K @ X6¶H ; d • çk¼ " _ö¶ . = Ž d X • çkLç èç öwüwü • çw ç! çö ç Uwü @fq ç • ç± AEd± . ÖŽ • çüçU • i ö wç çLüK wü " 0! ß3" 0%oâß K @%æ dç o " ÖæÇEz • " Sñ- " K • ŽP B² EL 7VN =y• \ Õ ' N ÷ 1ë3ó , . Õ c . ÖŽ-D GT " " Õ " 0! ß3" 0 %oâx ßK " X6¶H ; d • çk¼ " @ ö¶H êLç ; çk" _ö¶ . = Ži U±f=çk i wçk çw @ç] çw ç! ç èç öwüwü • çw ç! @fq ç • ç± æ =

