ᑲᓇᑕᐅᑉ ᐃᒪᕐᖕᒥᐅᑕᓕᕆᔨᖏᑦ

ᑭᓪᓕᓯᓂᐊᖅᑏᑦ
ᐅᑭᐅᖅᑕᖅᑑᑉ ᕿᑎᐊᓄᑦ ᐅᖅᑯᐊᓄᓪᓗ

ᑲᓇᑕᒥ ᑭᓪᓕᓯᓂᐊᖅᑏᑦ ᖃᐅᔨᒪᔨᑕᖏᑦᑕ ᑎᑎᕋᕐᕕᖓ ᑭᓪᓕᓯᓂᐊᖅᑏᑦ ᖃᐅᔨᓴᕐᑎᒻᒪᕆᖏᑕ ᐅᓂᒃᑳᖏᑦ 2008/057

ᕕᕝᕗᐊᕆ 2009 (ᐋᖅᑭᒋᐊᖅᑕᖅ ᒪᔾᔨ 2009)

ᐅᖃᐅᔾᔨᒋᐊᕈᑦ ᐊᕐᕙᓂᐊᕐᖕᓂᐅᑉ ᒥᒃᓵᓄᑦ

ᐅᑭᐅᖅᑕᖅᑑᑉ ᐅᖅᑯᐊᑕ − ᐱᓇᓐᓇᖅᐸᓯᐊᓂ

ᑲᓇᑕᒥᐅᑦ ᐊᑯᑭᑦᑐᕐᖕᒥᐅᓪᓗ ᐊᕐᕕᓂᐊᖅᐸᒃᑕᖏᓐᓂᒃ

ᔨ. ᑰᐅᓪ

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BCB
EA

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ᓄᓇᓐᖑᐊᖅ 1: ᐊᕐᕖᑦ ᐅᑎᖅᑕᕐᕕᖏᑕ ᐅᖓᓯᒌᓂᖏᑦ ᐊᐅᔭᒃᑯᓪᓗ ᓇᔪᖅᐸᒃᑕᖏᑦ ᐱᐅᕆᖕ−ᓱᒃᓯ−ᕕᐅᐳᐊᓪᓗ ᐃᒪᕕᐊᓂ
ᐅᐊᓚᓂᕐᖕᒥ (BCB) ᑲᓇᑕᐅᓪᓗ ᐅᑭᐅᖅᑕᖅᑐᐊᑕ ᑲᓇᓐᓇᖓᓂ
(EA) ᐊᕐᕕᖃᐅᕐᓂᖏ

ᖃᓄᐃᓕᐅᕐᓯᒪᓂᖏᑦ:

ᐅᑭᐅᖅᑕᖅᑑᑉ ᐅᖅᑯᐊᑕ ᑲᓇᓐᓇᖓᓂ ᑲᓇᑕᒥ ᐊᑯᑭᑦᑐᓪᓗ ᐱᓇᓐᓇᖓᓂ ᐊᕐᕕᖁᑎᖏᑕ ᓯᐊᒃᓯᒪᓂᖏᑦ ᐃᓱᒪᒋᔭᐅᓕᕐᒥᔪᑦ ᑖᒃᑯᓂᖓᑦᓴᐃᓐᓈᕆᐊᖏᑦ ᐊᒥᓲᓂᕐᓴᐅᓱᕆᔭᐅᓕᕆᓪᓗᑎᓪᓗ ᐅᐊᑦᓯᐊᕈ ᒥᒃᓴᐅᓴᔭᐅᓚᐅᕐᓯᒪᔪᓂᒃ. ᑖᒃᑯᓂᖓᑦᓴᐃᓐᓇᖅ ᐊᕐᕕᓂᐊᖅᐸᒃᑐᑦ ᑲᓇᑕᒥᐅᑦ (ᓄᓇᕗᒻᒥᐅᑦ ᓄᓇᕕᒻᒥᐅᓪᓗ) ᐊᑯᑭᑦᑐᕐᒥᐅᓪᓗ. ᐊᕐᕖᑦ ᐃᓛᒃᑰᖓᔫᔮᕐᑐᑦ ᐊᑕᐅᑦᓯᒦᖃᑦᑕᖅᑐᑎᒃ ᐊᕐᕌᒍᖃᑎᒌᑦ ᑎᒡᒐᐅᖃᑎᒌᑦ ᐊᕐᓇᓪᓘᖃᑎᒌᓪᓗ (ᓄᓃᑦ). ᐊᒥᓲᓂᖅᓴᐅᕙᑦᑐᑎᒃ ᐊᑕᐅᑦᓯᒦᑦᑐᑦ ᓄᓃᑦ ᐱᕈᕇᕐᓯᒪᓐᖏᑦᑐᓪᓗ ᑕᑯᔭᐅᖃᑦᑕᕐᓯᒪᓕᖅᑐᑦ ᕼᐊᑦᓴᓐ ᐸᐃ ᑕᐅᓯᔭᕐᔪᐊᖓᑕ ᐅᐊᓐᓇᖓᓂ−ᐊᒥᑦᑑᓪᓗ ᐃᒪᕕᐊᓂ ᑎᑭᐅᑎᓪᓗᒍ ᑰᒐᓇᔫᑉ ᑐᓄᓂᕈᓯᐅᓪᓗ ᐃᒪᖓᓄᑦ.

ᓄᓇᕗᒻᒥᐅᑦ ᐊᖑᓇᓱᒃᑏᑦ ᐊᕐᕙᓂᐊᒃᑲᓐᓂᕈᓐᓇᕐᓯᓚᐅᕐᖓᑕ 1996ᖑᑎᓪᓗᒍ; ᓄᓇᕕᒻᒥᐅᑦ (ᑯᐱᒃ ᐅᐊᓐᓇᖓᓂ) ᐃᓄᐃᑦ ᐊᕐᕙᓂᐊᕈᓐᓇᕐᓯᒋᓪᓗᑎᒃ 2008ᖑᑎᓪᓗᒍ. 2008ᒥ, ᐱᖓᓱᓂᒃ ᐊᕐᕙᑐᖃᓚᐅᕐᑐᖅ ᑲᔪᓯᑦᓯᐊᕐᑐᑎᒃ (ᒪᕐᕉᒃ ᓄᓇᕗᒻᒥ, ᐊᑕᐅᓯᖅ ᓄᓇᕕᒻᒥ). ᐊᑐᓂ ᐊᕐᕙᓂᐊᕐᑐᑦ ᓂᕿᑦᓴᒧᑦ ᐊᖏᖅᑕᐅᖅᑳᓚᐅᕐᓯᒪᔪᑦ ᑲᓇᑕᐅᑉ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᖏᓐᓄᑦ ᓚᐃᓴᓐᓯᑖᖅᑎᑕᐅᓂᒃᑯᑦ, ᐅᖃᐅᔾᔨᒋᐊᕐᓯᒪᓪᓗᑎᒃ ᐊᕐᕕᑐᖃᐅᓂᕐᓴᓂᒃ ᐊᖑᓇᓱᖃᑦᑕᖁᓪᓗᒋᑦ ᐊᒻᒪ ᒫᕋᓛᖏᓐᓂᒃ ᐱᑦᑕᐃᓕᖁᔭᐅᓪᓗᑎᒃ (<25’ ᐃᓯᒐᓪᓗᐊᑦ ᑐᖔᓃᑉᐸᑕ) ᐅᕝᕙᓘᓐᓃᑦ ᒫᕋᓛᕇᓂᒃ (ᐊᓈᓇᒌᓐᓂᒃ).

ᓄᓇᓖᑦ ᐊᕐᕙᓂᐊᖃᑦᑕᕐᓯᒪᔪᑦ ᐱᒐᓱᓐᓂᖅᓴᐅᖃᑦᑕᕐᓯᒪᒻᒪᑕ ᐊᖏᔫᑕᐅᓂᕐᓴᓂᒃ ᑎᒡᒐᓂᒃ ᑕᐃᒫᒃ ᐊᒥᓲᓂᕐᓴᑦ ᒪᒃᑕᖓᓂᒃ ᐱᖃᑕᐅᔪᓐᓇᕐᓂᐊᕐᖓᑕ. ᐃᓛᓐᓂᒃᑯᑦ ᓇᓗᓇᖃᑦᑕᕐᖓᑦ ᑎᒡᒐᐅᒻᒪᖔᑦ ᓄᓂᐅᒻᒪᖔᓪᓘᓐᓃᑦ. ᐊᕐᕕᑕᓂ 8ᓂᒃ ᓄᓈᖅᓯᓯᒪᓕᕐᑐᑦ ᓄᓇᕗᒻᒥ ᐊᑯᓐᓂᖓᓂ 1996 ᐊᒻᒪ 2008, ᐱᖓᓲᔪᕐᑑᓚᐅᕐᑐᑦ ᑎᒡᒐᑦ ᒪᕐᕉᓪᓗᑎᒃ ᓄᓃᒃ.

ᐃᖃᓗᓕᕆᔨᒃᑯᑦ ᐃᒪᕐᖕᒥᐅᑕᓕᕆᔨᒃᑯᓪᓗ ᐱᓕᕆᕝᕕᖓᑦ ᑲᓇᑕᐅᑉ ᐃᒪᕐᖕᒥᐅᑕᓕᕆᔨᒃᑯᖏᓐᓂ ᐅᑯᓂᖓ ᐊᐱᖅᑯᑎᖃᓚᐅᕐᑐᑦ

ᐅᑭᐅᖅᑕᖅᑑᑉ ᕿᑎᐊᓄᑦ ᐅᖅᑯᐊᓄᓪᓗ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐅᖅᑯᐊᓂ ᐊᕐᕙᓂᐊᕐᖕᓂᐅᑉ ᐋᖅᑭᒃᓯᒪᓂᖓ

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ᑭᓪᓕᓯᓂᐊᕐᑏᑦ ᖃᐅᔨᓴᕐᑎᖏᓐᓄᑦ:

1) ᖃᓄᖅ ᐋᖅᑭᒃᓱᖅᓯᒪᓂᖃᕆᐊᖃᕐᐸ ᐊᕐᕙᓂᐊᕐᖕᓂᐅᕙᒃᑐᖅ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᐊᑕ ᐅᖅᑯᐊᓂ ᐱᕕᐅᓗᐊᑦᑕᐃᓕᓯᓐᓈᑦ ᐊᖑᒻᒪᑎᔪᓐᓇᖁᓪᓗᒋᑦ ᐅᑎᖅᐸᓪᓕᐊᑎᑕᐅᓇᓱᓐᓂᖏᓐᓄᑦ ᐊᕐᕖᑦ ᑲᓇᑕᐅᑉ ᐅᖅᑯᐊᓂ−ᐊᑯᑭᑦᑐᑦ ᐱᓇᓐᓇᖓᑕ ᐃᒪᕕᐊᓃᑦᑐᑦ?

2) ᓄᓇᓐᖑᐊᑎᒍᑦ ᓇᓗᓇᐃᕐᓯᔪᖃᕈᓐᓇᕐᐹ ᐅᔾᔨᕆᔭᐅᓯᒪᔪᓂᒃ ᓂᕿᑦᓴᒧᑦ ᐊᕐᕙᓂᐊᕐᕕᐅᔪᓐᓇᕐᑐᓂᒃ ᐃᓐᓇᕈᕇᕐᓯᒪᓐᖏᑦᑐᓂᑦ (ᒥᑭᓐᓂᕐᓴᓂᑦ) ᑎᒡᒐᐃᑦ ᓄᓃᓪᓘᓐᓃᑦ ᐱᔭᐅᓐᖏᖔᕐᓗᑎᒃ?

ᑖᒃᑯᓇᓂ ᑎᑎᕋᕐᓯᒪᔪᑦ ᑭᐅᓇᓱᐊᕐᓯᒪᔪᑦ ᐆᒃᑐᕋᕐᓂᒃᑯᑦ ᐃᒥᓲᓂᕆᒐᔭᓐᖑᐊᕐᑕᖏᓐᓂᑦ ᐅᖃᓕᒫᒐᓪᓗ ᓴᖅᑭᑕᐅᓯᒪᔪᑦ ᒪᓕᒃᑐᒋᑦ.

ᓇᐃᓈᕐᓗᒍ

ᑲᓇᑕᐅᑉ ᐅᖅᑯᐊᓂ ᐊᕐᕖᑦ ᐊᑯᑭᑦᑐᓪᓗ ᐱᓇᓐᓇᖓᑕ ᐊᕐᕕᖏᑦ ᐅᑎᖅᐸᓪᓕᐊᑎᑕᐅᓇᓱᐊᕐᓂᖏᑦ ᓱᕐᕋᓗᐊᑦᑕᐃᓕᓯᓐᓈᑦ ᐅᑯᓂᖓ ᖃᐅᔨᓴᓚᐅᖅᑐᒍᑦ:

• ᐊᔪᕐᓇᓐᖏᒐᐃᑉᐸᑦ, ᐊᕐᕕᒐᓱᒋᐊᓖᑦ ᐱᕈᕇᕐᓯᒪᓐᖏᑦᑐᓂᒃ (ᑕᑭᓂᖏᑦᐊᑯᓐᓂᖓᓃᓪᓗᑎᒃ 7.5m ᒦᑕᑦ ᐊᒻᒪ 13.5m ᐅᕝᕙᓘᓐᓃᑦ ᐊᑯᓐᓂᖏᖓᓂ 24.6 ᐃᓯᒐᓪᓗᐊᑦ ᐊᒻᒪ 44.3 ᐃᓯᒐᓪᓗᐊᑦ ᑕᑭᓂᖏᑦ, ᐅᕝᕙᓘᓐᓃᑦ ≤ 4.5m ᒦᑕᑦ ᑐᖔᓂ ᐅᕝᕙᓘᓐᓃᑦ 14.8 ᐊᓯᒐᓪᓗᐊᑦ ᓂᐊᖁᖏᑎᒍᑦ ᓯᓕᓐᓂᖏᑦ).
• ᐊᕐᕕᒐᓱᓐᓂᐊᕐᐸᑕ ᐊᕐᓇᓪᓗᓂᒃ (ᓄᓂᕐᓂᒃ) ᖃᖓᓕᒫᒃᑯᑦ ᐱᓗᐊᑦᑕᐃᓕᔭᕆᐊᓖᑦ ᐅᐸᑦᑕᐅᑦᑕᐃᓕᓗᑎᓪᓗ ᓯᑯᓰᓚᐅᑉ ᐃᒪᖓᑕ ᐅᐊᓐᓇᖓᓃᑦᑐᑦ.
• ᓯᑯᓰᓚᐅᑉ ᐃᒪᖓᑕ ᐅᐊᓐᓇᖓᓃᑦᑐᑦ ᐊᕐᕕᒐᓱᒋᐊᓖᑦ ᑭᓯᐊᓂ ᐱᕈᕇᕐᓂᑰᓐᖏᑦᑐᓂᒃ, ᐅᐱᓐᓇᕋᓂ ᐊᕐᓇᓪᓗᑦ (ᓄᓃᑦ) ᕿᑐᕐᖏᐅᕈᓐᓇᑐᑦᓴᐅᒻᒪᑕᓱᓕ.
• ᐱᔭᐅᓗᐊᑦᑕᐃᓕᖁᓪᓗᒋᑦ ᐊᕐᓇᓪᓗᑦ (ᓄᓃᑦ), ᐊᖑᓇᓱᒃᑏᑦ ᐱᑦᑕᐃᓕᒋᐊᓖᑦ ᑕᑭᓂᕐᓴᓂᒃ 16.2m ᒦᑕᑦ ᐅᕝᕙᓘᓐᓃᑦ 53.2 ᐃᓯᒐᓪᓗᐊᓂᑦ ᑕᑭᓂᓖᑦ (> 5.4m ᒦᑕᑦ ᐅᕝᕙᓘᓐᓃᑦ 17.7 ᐊᓯᒐᓪᓗᐊᑦ ᓂᐊᖁᖏᑎᒍᑦ ᓯᓕᓐᓂᖏᑦ).

ᐊᑐᖅᑕᐅᒌᕐᓯᒪᔪᑦ

ᑲᓇᑕᐅᑉ ᐅᖅᑯᐊᑕ ᑲᓇᓐᓇᖓᓂ ᐊᑯᑭᑦᑐᓪᓗ ᐱᓇᓐᓇᖓᑕ ᐊᕐᕕᖏᑦ ᐊᕐᕙᓂᐊᕐᑕᓪᓚᕆᐅᖃᑦᑕᓚᐅᕐᖓᑕ

ᓂᐅᕐᕈᑎᒃᓴᒧᑦ ᐊᕐᕌᒍᓂᒃ 400ᖏᓐᓃᑦᑐᓂᒃ, ᐊᒻᒪ ᓂᕿᑦᓴᖅᓯᐊᖑᖃᑦᑕᕐᓂᑰᓪᓗᑎᒃ ᐊᑯᓂᐅᓂᕐᓴᒻᒪᕆᒃ. ᐊᕐᕙᓂᐊᕐᑎᓄᑦ ᓄᖑᑕᐅᐸᓗᓚᐅᕐᑎᓪᓗᒋᑦ ᓂᐅᕐᕈᑎᒃᓴᒧᑦ ᐊᒻᒪ ᖃᐅᔨᓴᕐᑕᐅᓚᐅᕐᑎᓪᓗᒋᑦ, ᑲᑎᓐᖓᑎᑕᐅᓕᕐᑐᑎᒃ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐅᐊᓚᓂᖓᑕ ᐱᓇᓐᓇᖓᓃᒃᑐᑦ, ᐆᒪᔪᑦ ᐃᓅᓴᓪᓕᓗᐊᖁᓇᒋᑦ ᐆᒪᔪᕐᓂᑦ ᑭᓪᓕᓯᓂᐊᕐᑏᑦ ᑲᓇᑕᒥ ᑲᑎᒪᔨᕋᓛᖏᑦ (ᑳᓱᕕᒃᑯᑦ) ᓇᓗᓇᐃᕐᑕᐅᓪᓗᑎᒃ ᐱᑕᖃᕈᓐᓃᑐᐃᓐᓇᕆᐊᖃᕆᐊᖏᑦ 1980ᖑᑎᓪᓗᒍ. ᐅᐱᕐᖔᖓᓂ 2005, ᐆᒪᔪᕐᓂᑦ ᑭᓪᓕᓯᓂᐊᕐᑏᑦ ᑲᓇᑕᒥ ᑲᑎᒪᔨᕋᓛᖏᑦ ᐃᓛᒃᑰᖓᓂᕋᐃᓕᓚᐅᕐᓯᒪᔪᑦ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐅᖅᑯᐊᓃᑦᑐᓂᑦ ᑎᑭᑦᑐᒍ ᐊᑯᑭᑦᑐᑦ ᕿᑭᖅᑖᓘᓪᓗ ᐃᒪᕕᐊᓃᑦᑐᓄᑦ ᐊᒻᒪ ᕼᐊᑦᓴᓐ ᐸᐃ ᓯᑯᓰᓚᐅᓪᓗ ᐃᒪᖓᓃᑦᑐᑦ ᐊᕐᕕᖁᑎᖏᑦ, ᑕᒪᒃᑮᓪᓗ ᓇᓗᓇᐃᕐᑕᐅᓪᓗᑎᒃ ᐊᑦᑕᖁᓲᑕᐅᓕᕆᐊᖏᑦ. ᑎᑎᕋᕐᑕᐅᖃᓯᐅᔾᔭᐅᑉᐸᑕ ᐆᒪᔪᑦ ᐃᓅᓴᓪᓕᓗᐊᖁᓇᒋᑦ ᐱᖁᖓᔭᓂ (ᓵᕋ), ᖃᓄᖅ ᐅᑎᖅᐸᓪᓕᐊᑎᑕᐅᔪᓐᓇᕐᒪᖔᑕ ᐸᕐᖕᓇᐅᑎᓂᒃ ᐋᖅᑭᒃᓱᐃᔪᖃᕆᐊᖃᓕᕋᔭᕐᑐᖅ.

ᑲᓇᑕᐅᑉ ᐅᖅᑯᐊᑕ ᑲᓇᓐᓇᖓᓂᒥᐅᑦ ᐊᑯᑭᑦᑐᕐᖕᒥᐅᓪᓗ, ᑭᓪᓕᖃᕐᑎᑕᐅᓪᓗᑎᒃ ᐊᕐᕙᓂᐊᕈᓐᓇᕐᖓᑕ ᓂᕿᑦᓴᒧᑦ, ᑭᓯᐊᓂᓕ ᐊᒥᓱᕈᒃᑲᓐᓂᖁᔨᔪᑦ ᐃᓄᐃᑦ ᐱᔭᒃᓴᒥᓐᓂᒃ ᑲᓇᑕᒥᐅᑉ ᐊᑯᑭᑦᑐᓪᓗ ᐱᓇᓐᓇᖓᓂᕐᖕᒥᐅᑦ. ᓄᓇᕐᔪᐊᒥ ᕿᓚᓗᒐᓕᕆᔩᑦ ᑲᒥᓴᖓᑦ ᒫᓐᓇᕋᑖᖅ ᐱᔪᓐᓇᐅᑎᑖᕐᑎᑦᓯᕋᑖᓚᐅᕐᖕᒥᔪᑦ ᒪᕐᕉᓐᓂᒃ ᐃᑭᓕᖅᓯᒍᓐᓇᕐᓯᑎᑕᐅᓪᓗᑎᒃ1 ᐊᕐᕌᒍᒥ ᐊᑯᑭᑦᑐᑦ ᐱᓇᓐᓇᖓᓂ, ᓯᕗᓂᑦᑎᓐᓂ ᐊᕐᕙᓂᐊᕈᓐᓇᕐᑎᑕᐅᓗᑎᒃ ᕿᒥᕐᕈᑲᓐᓂᓚᐅᕐᓗᒋᑦ ᐃᓚᒌᓃᑦᑐᑦ. ᑲᓇᑕᒥ, ᐊᕐᕙᓂᐊᕐᖕᓂᖅ ᑲᑐᔾᔭᐅᓪᓗᓂ ᐊᐅᓚᑕᐅᕙᒻᒪᑦ ᑲᓇᑕᐅᑉ ᐃᒪᕐᖕᒥᐅᑕᓕᕆᔨᖏᓐᓄᑦ, ᓄᓇᕗᒻᒥ ᐆᒪᔪᓕᕆᔨᕐᔪᐊᑦ ᑲᑎᒪᔨᖏᓐᓄᑦ, ᐊᒻᒪ ᓄᓇᕕᐅᑉ ᑕᕆᐅᖓᓄᑦ ᐆᒪᔪᓕᕆᔨᒻᒪᕇᑦ ᑲᑎᒪᔨᖏᑦ. ᑕᐃᒪᓐᖓᑦ

1
ᐃᑭᓕᖅᑕᖅ ᑐᑭᓕᒃ ᐅᓈᑉ ᓴᒃᑯᖓ ᑕᑦᓯᑲᑐᐊᖅᐸᑦ ᐊᕐᕕᒧᑦ.

ᐅᑭᐅᖅᑕᖅᑑᑉ ᕿᑎᐊᓄᑦ ᐅᖅᑯᐊᓄᓪᓗ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐅᖅᑯᐊᓂ ᐊᕐᕙᓂᐊᕐᖕᓂᐅᑉ ᐋᖅᑭᒃᓯᒪᓂᖓ

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ᐊᕐᕙᓂᐊᕈᓐᓇᐅᑎᓂᒃ ᓚᐃᓴᓐᓯᑖᕐᑎᑦᓯᖃᑦᑕᓕᔪᒻᒪᑕ ᑲᓇᑕᐅᑉ ᑲᓇᓐᓇᖓᓂ 1996ᖑᑎᓪᓗᒍ, ᐊᕐᕕᑕᐅᔪᓐᓇᕐᑐᑦ ᑐᓐᖓᕕᖃᕐᑎᑕᐅᓯᒪᒻᒪᑕ ᒪᕐᕉᓕᖓᓱᕆᔭᐅᔪᓂᒃ ᐊᒻᒪ ᑭᓪᓕᓯᓂᐊᕐᑏᑦ ᖃᐅᔨᓴᕐᑎᖏᑦᑕ ᐅᖃᐅᔾᔨᒋᐊᕈᑎᒥᓂᖏᓐᓂᒃ 1995-96ᒥ ᖃᐅᔨᓴᕈᑎᒥᓂᖏᓐᓂᒃ ᐅᖃᕐᓯᒪᓪᓗᑎᒃ ᐊᑕᐅᓯᕐᖕᒥᑦ ᐊᕐᕌᒍᑦ ᐱᖓᓱᑦ ᓈᔭᕋᐃᑉᐸᑕ ᐊᕐᕙᒍᓐᓇᕐᓂᕋᕐᑕᐅᓪᓗᑎᒃ ᕼᐊᑦᓴᓐ ᐸᐃ ᑕᓯᐅᔭᕐᔪᐊᖓᑕ−ᓯᑯᓰᓚᐅᓪᓗ ᐃᒪᖓᑕ ᐊᕐᕕᖁᑎᖏᓐᓂᒃ ᐊᒻᒪ ᐊᕐᕕᒍᓐᓇᕐᓗᑎᒃ ᐊᑕᐅᓯᕐᖕᒥᒃ ᐊᕐᕌᒍᑦ 13 ᓈᔭᕋᐃᑉᐸᑕ ᐊᑯᑭᑦᑐᑦ ᕿᑭᖅᑖᓘᓪᓗ ᐃᒪᕕᐊᓂ (ᑲᓯᓐᔅ ᐅᓂᒃᑳᖏᑦ et al. 1998).

2007ᖑᑎᓪᓗᒍ, ᖃᐅᔨᓴᕐᑎᒻᒪᕇᑦ ᑐᑭᑖᕈᑎᒋᓚᐅᕐᑕᖏᑦ ᐱᐅᖅᓱᐊᓯᓐᓈᑦ ᐆᒪᔪᖅᑕᐅᔪᓐᓇᕋᔭᓐᖑᐊᕐᑐᑦ (PBR) ᖃᐅᔨᓴᕈᑎᒥᓃᑦ ᑐᓐᖓᕕᐅᓪᓗᑎᒃ ᐃᓚᒌᓐᓂᖏᑦ ᐊᑕᐅᓯᕐᒥᓐᖔᕐᓂᕋᕐᑕᐅᓪᓗᑎᒃ, ᒥᒃᓴᐅᓴᔭᐅᓯᒪᓪᓗᑎᒃ 14,400ᖏᓐᓃᒋᐊᒃᓴᖅ ᐊᕐᕖᑦ ᐊᒥᓲᓂᖏᑦ (ᑑᐃᒃ ᐅᓂᒃᑳᖏᑦ et al. 2007), ᓇᓗᓇᖅᑰᔨᒍᓐᓃᕐᑐᓂ 18ᓂᒃ ᐊᕐᕕᖃᑦᑕᕋᓗᐊᕐᐸᑕ/ᐊᕐᕌᒍᑕᒫᑦ ᓱᕐᕋᐃᓗᐊᕋᔭᓐᖏᒋᐊᖏᑦ ᐊᕐᕖᑦ ᐅᑎᖅᐸᓪᓕᐊᑎᑕᐅᓇᓱᓐᓂᖏᓐᓂ (ᑲᓇᑕᐅᑉ ᐃᒪᕐᖕᒥᐅᑕᓕᕆᔨᖏᑦ 2008). ᑭᓯᐊᓂᓕ, ᖃᐅᔨᓴᕐᓂᒥᓃᑦ ᑐᓴᒐᒃᓴᖃᓚᐅᓐᖏᑦᑐᑦ ᖃᓄᖅ ᓱᕐᕋᐅᑎᒐᔭᕐᒪᖔᑕ ᓂᕈᐊᕆᔭᐅᓂᕐᓴᐅᕙᒃᑐᑦ ᐱᖃᓯᐅᔾᔭᐅᓯᒪᓐᖏᑦᑐᑦ ᐊᕐᕕᓂᐊᕈᓯᐅᑉ ᐋᖅᑭᒃᓱᖅᓯᒪᓂᖓ ᐅᑎᖅᐸᓪᓕᐊᑎᑦᓯᓇᓱᓐᓂᑎᓐᓄᑦ. ᖃᐅᔨᓴᕐᑕᐅᓚᐅᕐᑐᑎᒃ ᐅᔾᔨᕐᓇᖅᑐᔮᖅᑐᖅ ᐃᓚᒌᑦ ᐃᓛᒃᑰᖓᔫᔮᕆᐊᖏᑦ ᓯᐊᒃᓯᒪᔪᑦ ᐅᑭᐅᖃᑎᒌᑎᒍᑦ ᐊᒻᒪ ᕿᑐᕐᖏᐅᕈᓐᓇᕐᑐᑦ ᓱᓕ (ᑲᓯᓐᔅ ᐊᒻᒪ ᐸᓚᐅ 2003), ᐃᒻᒪᖃ ᐊᕐᕙᓂᐊᕐᓂᐊᕐᑐᑦ ᓂᕈᐊᕆᔭᖃᕐᓂᖅᓴᐅᓕᕐᓗᑎᒃ ᐱᔪᒪᔭᒥᓂᒃ ᐊᕐᕌᒍᖏᑎᒍᑦ ᕿᑐᕐᖏᐅᕈᓐᓇᕐᓂᖏᓐᓂᓪᓘᓐᓃᑦ. ᒫᓐᓇᓕ, ᐊᕐᕙᓂᐊᕐᓂᖕᒧᑦ ᓚᐃᓴᓐᓯᑖᕈᑎᐅᕙᒃᑐᑦ ᒪᓕᒐᖏᑦ ᐱᑦᑕᐃᓕᑎᑦᓯᒻᒪᑕ ᐊᕐᕖᑦ ᒫᕋᓛᖏᓐᓂᒃ (<25’ ᐃᓯᒐᓪᓗᐊᑦ ᑐᖔᓂ) ᐅᕝᕙᓘᓐᓃᑦ ᒫᕋᓛᓕᓐᓂᑦ (ᕿᑐᕐᖓᕇᑦ), ᑭᓯᐊᓂᓕ ᓇᓗᓇᕐᖕᓂᖓᓄᑦ ᐊᖑᓴᓪᓘᒻᒪᖔᑕ ᐊᕐᓇᓪᓘᒻᒪᖔᑕᓘᓐᓃᑦ ᐃᓄᑑᑉᐸᑕ ᐊᕐᓇᓪᓗᒻᒥᑦ (ᓄᓂᕐᒥᒃ) ᐱᔪᖃᑐᐃᓐᓇᕆᐊᖃᕐᐳᑦ.

ᐊᒥᓲᓂᖏᓐᓄᑦ ᓇᓗᓇᕐᑐᑦ ᐃᓚᐃᓐᓇᖏᓐᓂᒃ ᐃᓚᒌᓃᒃᑐᓂᒃ ᒥᒃᓴᐅᓴᓂᑰᒻᒪᑕ (ᓲᕐᓗ, 14,400. 95% CI 4,811-43,105) ᐊᒻᒪ ᐱᑐᐃᓐᓇᕆᐊᖃᕐᓂᖏᓐᓂᒃ ᐱᔭᐅᖁᔭᐅᓐᖏᑦᑐᓂᒃ, ᐃᓱᒪᒃᑯᑦ ᖃᓄᖅᑑᕐᓯᒪᓪᓗᑎᒃ ᐃᓚᒌᓃᒃᑐᑦ ᖃᓄᐃᓕᒐᔭᓐᖑᐊᕐᒪᖔᑕ ᐊᖑᔭᐅᖃᑦᑕᕐᓂᖏᑦ ᒪᓕᓪᓗᒋᑦ ᐊᒥᓲᓂᕆᒐᔭᓐᖑᐊᕐᑕᖏᓪᓗ ᐊᔾᔨᒌᖏᑦᑐᓂᒃ ᐊᑐᖅᑐᑕ ᕿᒥᕐᕈᓚᐅᖅᑕᕗᑦ.

ᖃᐅᔨᓴᕐᑕᐅᓂᑯᓂᒃ ᕿᒥᕐᕈᓂᖅ

ᒪᕐᕉᒻᒪᑎᒃ ᑐᑭᓯᒋᐊᕐᕕᐅᓯᒪᔪᑦ ᖃᐅᔨᓴᕐᑕᐅᖁᓪᓗᒍ ᓇᓪᓕᐊᓐᓂᒃ ᓂᕈᐊᕆᔭᖃᕐᓂᕐᓴᐅᒻᒪᖔᑕ ᐊᕐᕕᓂᖕᒥ ᐊᒻᒪ ᕿᒥᕐᕈᒍᑕᐅᓯᒪᔪᑦ ᖃᓄᖅ ᐅᑎᖅᐸᓪᓕᐊᔪᓐᓇᕐᒪᖔᑕ ᑲᓇᑕᐅᑉ ᐅᖅᑯᐊᓂ-ᐊᑯᑭᑦᑐᓪᓗ ᐱᓇᓐᓇᖓᑕ ᐃᒪᕕᐊᓂ ᐊᕐᕖᑦ. ᓯᕗᓪᓖᑦ ᐅᓂᒃᑳᑦ ᖃᐅᔨᓴᕐᑕᐅᓂᑯᒥᓃᑦ ᑲᓯᓐᔅ ᐊᒻᒪ ᐳᓚᐅᒧᑦ (2003) ᓇᓗᓇᐃᕐᓯᓯᒪᒻᒪᑕ ᐃᓛᒃᑰᖓᔾᔪᓯᖏᓐᓂᒃ ᐊᕐᕖᑦ ᐅᑭᐅᖏᑎᒍᑦ ᕿᑐᕐᖏᐅᕈᓐᓇᕐᓂᖏᑎᒍᓪᓗ (ᐃᓪᓚᐅᖃᕈᓐᓇᕐᑐᑦ) ᐊᐅᔭᐅᓂᖓᓂ ᓇᒥᑐᐃᓐᓇᑦᓯᐊᖅ ᖃᐅᔨᓴᕐᕕᖏᓐᓂ. ᖃᐅᔨᓚᐅᕐᑐᑦ ᐊᒥᓲᒋᐊᖏᑦ ᒫᕋᓛᑦ ᐊᒻᒪ ᐱᕈᕇᕐᓯᒪᓐᖏᑦᑐᑦ ᐊᕐᕕᐊᓛᖑᓂᕐᓴᑦ, ᐃᓛᓐᓂᒃᑯᑦ ᐊᕐᓇᓪᓗᓐᓄᑦ ᐱᖃᑕᐅᕙᒃᑐᑎᒃ, ᓯᑯᓰᓚᐅᑉ (ᐊᒥᑦᑑᑉ) ᐃᒪᖓᑕ ᐅᐊᓐᓇᖓᓂ (ᐊᑯᓐᓂᖓᓃᒃᑐᑦ 79% ᐳᓴᑦ ᐊᒻᒪ 97% ᐳᓴᑦ ᐆᒃᑐᖅᑕᐅᖃᑦᑕᓚᐅᕐᑐᑦ ᑕᑭᓂᖏᑦ ᒪᓕᒃᑐᒋᑦ ᐊᕐᕌᒍᑦ ᖃᐅᓴᕋᒃᓴᓂᕕᖏᑦ). ᐅᔾᔨᕆᔭᐅᓚᐅᕐᑐᓂ ᐃᓱᒪᓇᖅᓯᔪᖅ ᐃᓐᓇᐅᓂᕐᓴᑦ ᐊᕐᕖᑦ ᓯᑯᓰᓚᐅᑉ ᐃᒪᖓᓂ ᐃᒻᒪᖃ ᒫᕋᓛᖃᕐᖓᑕᓱᓕ ᐊᒫᒪᔨᐊᓖᑦ. ᐃᓱᒪᓇᕐᑐᖅ ᐃᓪᓚᐅᖃᓐᖏᑦᑐᑦ ᒫᕋᓛᓪᓘᓐᓃᑦ ᐃᒻᒥᓂᕐᓱᕈᓐᓇᕐᓯᔪᑦ ᐊᒻᒪ ᑎᒡᒐᑦ ᐊᓯᖏᓐᓃᒋᐊᖏᑦ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᐊᑕ ᑲᓇᓐᓇᖓᓂ ᐊᒻᒪ ᐊᑯᑭᑦᑐᑦ ᐱᓇᓐᓇᖅᐸᓯᐊᓂ.

ᐊᓯᖏᓐᓂᒃ ᑐᑭᓯᓇᕐᓯᒋᐊᕈᑎᓂᒃ ᐋᖅᑭᑦᓱᐃᓚᐅᕐᒥᔪᒍᑦ ᐆᒃᑐᕋᐅᑎᓕᐅᕐᑐᑕ ᐊᕐᕕᓂᒃ ᖃᐅᔨᓴᕈᑎᒥᓃᑦ ᑎᑎᖅᑲᕐᑕᖏᑦ ᐊᑐᖅᑐᒋᑦ. ᑐᑭᓯᓇᓱᐊᕈᒪᒧᑦ, ᐆᒃᑐᕋᐅᑎᓕᐅᓚᐅᕐᑐᒍᑦ ᑕᑯᓐᓇᓐᖑᐊᕐᓯᒪᔪᓂᒃ ᐋᖅᑭᑦᓱᐃᓚᐅᕐᑐᑕ ᑎᓴᒪᐃᕋᕐᓗᑎᒃ ᐊᕐᕙᓂᐊᕐᑐᖃᕐᓂᖅᐸᑦ ᖃᓄᐃᓕᖓᓕᕋᔭᓐᖑᐊᕐᒪᖔᑕ ᑲᓇᑕᐅᑉ ᑲᓇᓐᓇᖓᓂ−ᐊᑯᑭᑦᑐᓪᓗ ᐱᓇᓐᓇᖓᓂ ᐊᕐᕖᑦ. ᐆᒃᑐᕋᐅᑕᐅᓚᐅᕐᑐᑦ ᐋᖅᑭᒃᓱᖅᓯᒪᓂᖏᑦ ᐅᓂᒃᑳᕆᔭᐅᓯᒪᔪᑦ ᕆᓵᑦ ᐅᓂᒃᑳᖓᓂ et al. (2003), ᑭᓯᐊᓂᓕ ᐆᒃᑐᕋᐅᑎᕗᑦ ᑕᕝᕙᓂ ᐱᖓᓲᓕᖓᑐᐃᓐᓇᕐᑐᒋᑦ ᐱᕈᕐᐸᓪᓕᐊᔾᔪᓯᖏᑦ (ᒫᕋᓛᑦ, ᐱᕈᕇᕐᓂᑰᓐᖏᑦᑐᑦ, ᐃᓐᓇᕈᕇᕐᓂᑯᑦ) ᐊᒻᒪ ᑕᐃᒫᓪᓚᒃᑖᓐᖑᐊᕐᑐᑎᒃ ᐊᓯᖅᑯᕕᖃᕋᓂ (ᓲᕐᓗ, ᓇᓗᓇᕋᓂ ᖃᐅᔨᓴᕐᑕᐅᖁᔭᐅᔪᒧᑦ ᖃᐅᔨᓴᕐᑕᐅᖃᓯᐅᔾᔭᐅᒋᐊᓖᑦ ᐅᑉᐱᕆᔭᖏᑦ.) ᐃᓚᒌᓃᒃᑐᑦ ᐱᐅᓯᖏᑦ ᐊᑐᖅᑕᐅᓚᐅᕐᑐᑦ ᒪᓕᒃᑐᒋᑦ ᖃᐅᔨᓴᕐᑕᐅᓂᑯᑦ ᐊᑐᐃᓐᓇᕆᔭᕗᑦ ᐊᒻᒪ ᖃᓄᖅᑑᖑᐊᕈᑎᒋᓯᒪᔭᕗᑦ ᓇᓚᐅᑦᓵᕐᓂᒃᑯᑦ ᐆᒃᑐᕋᐅᑎᖃᕐᑐᑕ ᐊᑐᕋᑦᑎᒍ ᐊᒥᓱᕈᕐᐸᓪᓕᐊᒐᔭᓐᖑᐊᕐᑐᑦ

ᐅᑭᐅᖅᑕᖅᑑᑉ ᕿᑎᐊᓄᑦ ᐅᖅᑯᐊᓄᓪᓗ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐅᖅᑯᐊᓂ ᐊᕐᕙᓂᐊᕐᖕᓂᐅᑉ ᐋᖅᑭᒃᓯᒪᓂᖓ

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ᐊᕐᕕᑐᖃᖃᑦᑕᖏᑦᓯᐊᒻᒪᕆᒃᐸᑦ ᐊᒻᒪ ᖃᑦᓰᓐᓇᑯᓗᐃᑦ ᐳᓴᑦᑎᖏᑎᒍᑦ ᐊᓐᓇᐅᒪᒐᔭᕆᐊᖏᑦ ᐊᕐᕌᒍᖃᓕᕈᓐᓇᕐᑐᑎᒃ 100ᓂᒃ*. ᓇᓚᐅᑦᓵᕐᓂᒃᑯᑦ ᐊᒥᓲᓂᕆᒐᔭᓐᖑᐊᕐᑕᖏᑕ ᓈᓴᐅᑎᖏᑦ 5,000 ᐊᒻᒪ 10,000 ᕿᒥᕐᕈᒍᑕᐅᓚᐅᕐᑐᑦ ᐅᐱᓐᓇᕋᓂ ᐊᒥᓲᓂᖏᑦ ᐃᓚᒌᓃᒃᑐᑦ ᓇᓗᓇᕐᓂᖏᓐᓄᑦ ᓱᓕ ᐊᒻᒪ, ᑕᐃᒪᐃᒻᒪᑦ, ᐊᑦᑕᖁᓲᑕᐅᓗᑎᒃ ᐃᓱᒪᒋᔭᐅᒋᐊᖃᖅᑐᑦ ᓱᓕ.

ᐆᒃᑐᕋᐅᑎᒋᓚᐅᕐᑕᕗᑦ ᓇᓚᐅᑦᓵᕐᑐᑕ ᑎᓴᒪᐃᕐᓱᕐᓗᑎᒃ ᐊᕐᕕᓂᐊᕋᔭᓐᖑᐊᕐᑐᑦ ᐊᑐᖅᑐᒋᑦ: “ᐊᖑᓇᓱᒃᑕᐅᕙᓐᖏᓗᑎᒃ”, “ᐱᕈᕇᕐᓯᒪᔪᑦ ᐱᑐᖃᑦ” ᐊᖑᔭᐅᕙᓪᓗᑎᒃ (ᓇᓕᒧᒌᑎᑕᐅᓪᓗᑎᒃ ᑎᒡᒐᖅ ᓄᓂᕐᓗ), “ᐱᕈᕇᕐᓯᒪᓐᖏᑦᑐᑦ ᐃᓐᓇᐅᓕᕐᑑᒐᓗᐊᑦ” ᐊᖑᔭᐅᕙᓪᓗᑎᒃ (ᐅᑭᐅᖃᑎᒌᑦ ᐊᕐᓇᓪᓗᑦ ᐊᖑᓴᓪᓗᓪᓘᓐᓃᑦ ᐊᔾᔨᒌᑎᑕᐅᓪᓗᑎᒃ ᐊᒥᓲᓂᖏᑦ), ᐊᒻᒪ “ᐃᓐᓇᖅ ᐊᕐᓇᓪᓗᒃ (ᓄᓂᖅ)” ᐊᖑᔭᐅᓐᓂᖅᐸᑦ (ᐊᕐᓇᓪᓗᐃᑦ ᐱᕈᕇᕐᓯᒪᔪᑦ ᑭᓯᐊᓂ). ᐃᒻᒥᒃᑰᕐᑐᑦ ᐆᒃᑐᕋᐅᑎᕗᑦ, ᐱᖃᓯᐅᑎᓐᖏᑕᑐᐊᕆᓗᒍ, “ᐊᖑᓇᓱᒃᑕᐅᕙᓐᖏᓪᓗᑎᒃ”, ᖁᓕᑦ ᐊᕐᕖᑦ ᐃᒻᒥᒃᑰᖓᓗᑎᒃ2

ᐱᔭᐅᕙᒃᐸᑕ ᐊᕐᕌᒍᑕᒫᑦ
ᐃᓚᒌᓂᒃ. “ᐱᕈᕇᕐᓯᒪᔪᑦ ᐱᑐᖃᑦ” ᐊᖑᔭᐅᕙᒃᐸᑕ ᑕᓪᓕᒪᓂᒃ ᐱᕈᕇᕐᓂᑯᓂᒃ ᐱᕙᓪᓗᑎᒃ ᑕᒪᒃᑮᓐᓂᒃ ᐊᖑᓴᓪᓗᓂᒃ ᐊᕐᓇᓪᓗᓂᓪᓗ. “ᐱᕈᕇᕐᓯᒪᓐᖏᑦᑐᑦ ᐃᓐᓇᐅᓕᕐᑑᒐᓗᐊᑦ” ᐊᕐᕕᑦᑐᖃᓐᖑᐊᕐᓗᓂ 2.5 ᐱᕈᕇᕐᓯᒪᓐᖏᑦᑐᑦ ᐊᖑᓴᓪᓗᓂᒃ, 2.5 ᐱᕈᕇᕐᓯᒪᓐᖏᑦᑐᑦ ᐊᕐᓇᓪᓗᑦ, 2.5 ᐱᕈᕇᕐᓯᒪᔪᑦ ᑎᒡᒐᑦ, ᐊᒻᒪ 2.5 ᐱᕈᕇᕐᓯᒪᔪᑦ ᓄᓃᑦ. “ᐱᕈᕇᕐᓯᒪᔪᑦ ᓄᓃᑦ” ᒪᓕᒃᓯᒪᔪᑦ ᐃᓱᒪᖅᓲᑕᐅᓗᑎᒃ ᐊᕐᕕᑐᖃᖃᑦᑕᖅᑲᑦ ᖁᓕᓂᒃ (10) ᐊᕐᓇᓪᓗᓂᒃ ᐱᕈᕇᕐᓂᑯᓂᒃ.

“ᐃᓐᓇᖅ ᐊᕐᓇᓪᓗᒃ (ᓄᓂᖅ)” ᐊᑐᖅᑕᐅᒐᒥ ᓇᓚᐅᑦᓵᕐᓂᒃᑯᑦ ᐊᕐᕕᑕᐅᕙᓕᕐᓂᖅᑲᑕ ᓱᕐᕋᐃᕙᓪᓕᐊᒐᔭᕐᑐᔮᕐᑐᑐᐊᑦ ᐅᑎᖅᐸᓪᓕᐊᔪᓐᓃᕐᓗᑎᒃ, ᑭᖑᓂᑦᓯᐊᖏᑦ “ᐱᕈᕇᕐᓯᒪᔪᑦ ᑭᓯᐊᓂ”, “ᐱᕈᕇᕐᓯᒪᓐᖏᑦᑐᑦ ᐃᓐᓇᐅᓕᕐᑑᒐᓗᐊᑦ”, ᐊᒻᒪ “ᐊᖑᓇᓱᒃᑕᐅᕙᓐᖏᓪᓗᑎᒃ” ᒥᑭᓪᓕᕙᓪᓕᐊᓪᓗᑎᒃ ᐆᒃᑐᕋᐅᑎᕗᑦ ᓱᕐᕋᐃᒐᔭᕐᓂᖏᑦ. ᐱᕈᕇᕐᓯᒪᓐᖏᑦᑐᑦ ᑭᓯᐊᓂ ᐊᕐᕕᑕᐅᕙᒃᐸᑕ ᓱᕐᕋᐃᖏᓐᓂᕐᐹᖑᒐᔭᕐᑐᑦ ᐅᑎᖅᐸᓪᓕᐊᓂᖏᑦᑕ ᐊᒥᓲᓂᖏᓐᓂᒃ ᐅᐱᓐᓇᕋᓂ ᕿᑐᕐᖏᐅᕆᐅᕐᓂᐅᖏᑦᑐᓂᑦ ᐊᕐᕕᖃᑦᑕᕋᔭᕐᑐᑦ. ᐃᓚᒌᓂ ᐊᒥᓲᓂᖏᑦ ᓱᕐᕋᓗᐊᔾᔭᐃᖁᓪᓗᒋᑦ ᐅᑎᖅᐸᓪᓕᐊᓂᐊᕐᖓᑕ ᐅᐱᓐᓇᕋᓂ ᕿᑐᕐᖏᐅᕈᓐᓇᕐᑐᑦ ᐱᔭᐅᔾᔮᖏᑦᑐᑦ ᐃᓚᒌᓂᒃ. ᐃᓚᒌᑦ ᓱᕐᕋᓗᐊᖁᓇᒋᑦ ᐅᑎᖅᑎᑦᓯᕙᓪᓕᐊᒐᓱᑦᑎᓪᓗᑕ ᐊᖑᔭᑎᒍᑦ, ᐊᕐᕕᓂᒃ ᐱᕈᕇᕐᓂᑰᓐᖏᑦᑐᓂᒃ ᑭᓯᐊᓂ ᐱᓇᓱᐊᖃᑦᑕᖅᑲᑕ ᓯᑯᓰᓚᐅᑉ ᐃᒪᖓᓂ ᐊᑲᐅᓂᖅᓴᐅᒐᔭᕐᑐᖅ (≤ 13.5 m ᒦᑕᑦ ᑐᖔᓃᑦᑐᑦ ᐅᕝᕙᓘᓐᓃᑦ 44.3 ᐃᓯᒐᓪᓗᐊᓂᑦ ᑕᑭᓂᖃᖅᐸᑦ) ᐅᐱᓐᓇᕋᓂ ᖃᑦᓯᑲᓪᓚᐃᑦ ᐃᓐᓇᕈᕇᕐᓂᑯᑦ ᐊᐅᔭᐅᓂᖓᓂ ᓇᔪᖅᐸᑦᑕᖏᓐᓃᑦᑐᑦ ᐊᕐᓇᓪᓗᐃᑦ ᐱᑕᖃᕐᓂᕐᓴᐅᓂᐅᓴᐃᓐᓇᑐᑦᓴᐅᒻᒪᑕ. ᐅᐱᓐᓇᕋᓂ ᐊᕐᓇᓪᓘᒻᒪᖔᑦ ᐊᖑᓴᓪᓘᒻᒪᖔᓪᓘᓐᓃᑦ ᐱᕈᕇᕐᓂᑰᓕᕐᑎᓪᓗᒍ ᐃᒪᕕᒻᒥ ᐊᔪᕐᓇᐸᓗᒻᒪᑦ ᓇᓗᓇᐃᕋᓱᒋᐊᒃᓴᖅ ᓇᓪᓕᐊᖑᒻᒪᖔᑕ, ᐱᔭᐅᑦᑕᐃᓕᖁᓪᓗᒋᑦ ᐊᕐᓇᓪᓗᐃᑦ ᐱᕈᕇᕐᓂᑯᑦ, ᐱᕈᕇᕐᓂᑰᓐᖏᑦᑐᑦ ᐊᑯᓐᓈᕿᔪᑦ ᐊᕐᕕᑕᐅᕙᒃᐸᑕ ᓱᓕ ᐊᑲᐅᓂᖅᐹᖑᔫᑎᒋᔭᖅ ᓇᒥᑐᐃᓐᓇᑦᓯᐊᖅ ᐅᑎᖅᑕᕐᕕᖏᓐᓂ ᓇᔪᖅᐸᑦᑕᖏᓐᓂᓗ.

ᐊᖑᓴᓪᓗᐃᑦ ᑎᒡᒐᑦ ᓄᓈᕐᑕᐅᓂᑯᑦ ᐊᓛᔅᑲᒥ ᐊᑯᓐᓂᖓᓂ 1973 ᐊᒻᒪ 1989 ᑕᑭᓂᖏᑦ ᐊᑯᓐᓂᖓᓃᒐᔪᓚᐅᕐᑐᑦ 16.2m ᒦᑕᑦ ᐅᕝᕙᓘᓐᓃᑦ 53.1 ᐃᓯᒐᓪᓗᐊᑦ ᐊᕐᓇᓪᓗᐃᓪᓗ ᓄᓃᑦ ᓄᓈᕐᑕᐅᓂᑯᑦ ᑕᑭᓂᖃᕋᔪᒃᑐᑎᒃ 18.0m ᒦᑕᑦ ᐅᕝᕙᓘᓐᓃᑦ 59.1 ᐃᓯᒐᓪᓗᐊᑦ (ᑳᔅᑭ et al. 1993). ᓇᑉᐸᖏᑕ ᓇᑉᐸᑲᓐᓂᖏᑦ ᐊᕐᓇᓪᓗᐃᑦ ᐆᒃᑐᕋᕐᑕᐅᖃᑦᑕᓚᐅᕐᑐᑦ ᑕᐃᒃᑯᓇᓂ ᐊᕐᕕᑕᐅᔪᓂ ᑕᑭᓂᕐᓴᐅᓪᓗᑎᒃ 16.2m ᒦᑕᑦ ᐅᕝᕙᓘᓐᓃᑦ 53.1 ᐃᓯᒐᓪᓗᐊᑦ. ᐃᓱᒪᓇᖅᓯᓪᓗᓂ ᐊᕐᕕᑕᐃᓕᖁᓪᓗᒋᑦ ᑕᑭᓂᕐᓴᓂᒃ 16.2m ᒦᑕᓂᑦ ᐅᕝᕙᓘᓐᓃᑦ 53.1 ᐃᓯᒐᓪᓗᐊᓂᑦ ᓇᒥᑐᐃᓐᓇᑦᓯᐊᖅ. ᑖᓐᓇ ᐊᑐᓕᖁᔨᔾᔪᑎ ᓄᖅᑲᑎᑦᓯᓯᐊᒻᒪᕆᔾᔮᖏᑦᑑᒐᓗᐊᖅ ᐊᕐᕕᐸᓐᓂᕐᖕᒥᑦ ᐊᕐᓇᓪᓗᓂᒃ ᐱᕈᕇᕐᓂᑯᓂᒃ, ᐊᒃᓱᓪᓕ ᓄᖅᑲᐹᓪᓕᑎᑦᓯᔪᓐᓇᕐᖓᑕ ᐱᔭᐅᒐᔪᓐᓂᖏᓐᓂᒃ ᓇᒥᑐᐃᓐᓇᖅ ᐊᕐᕕᓂᐊᕐᕕᐅᔪᓐᓇᕐᑐᓂ ᖃᑦᓰᓐᓇᐅᑎᓪᓗᒋᑦ ᐅᕝᕙᓘᓐᓃᑦ ᐱᑕᖃᓐᖏᑦᓯᐊᒻᒪᕆᒃᑎᓪᓗᒋᑦ ᐱᕈᕇᕐᓂᑰᓐᖏᑦᑐᑦ ᐊᑯᓐᓈᕿᔪᑦ ᐊᒻᒪ ᑎᒡᒐᑦ ᓄᓃᓪᓗ ᓇᓕᒧᒌᐸᓗᑦᑎᓪᓗᒋᑦ ᑕᑭᓂᖏᑦ.

ᐱᔭᕇᕈᑏᑦ ᐅᖃᐅᔾᔨᒋᐊᕈᑏᓪᓗ

ᐊᕐᕙᓂᐊᕐᓂᖅ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᐊᑕ ᑲᓇᓐᓇᖓᓂ (ᐅᖅᑯᐊᓂ) ᐋᖅᑭᒃᓱᖅᓯᒪᔪᓐᓇᕐᖓᑦ ᓇᐅᒃᑯᑦ ᓱᕐᕋᐃᓐᖏᓛᖑᔪᓐᓇᕐᑐᓂᒃ ᐅᑎᖅᑎᑕᐅᕙᓪᓕᐊᓇᓱᓐᓂᖏᓐᓂ ᐊᕐᕖᑦ ᑲᓇᑕᐅᑉ ᐅᖅᑯᐊᑕ ᑲᓇᓐᓇᖓᓂ − ᐊᑯᑭᑦᑐᓪᓗ ᐱᓇᓐᓇᖓᑕ ᐊᕐᕕᖁᑎᖏᑦ ᐅᑯᐊ ᐆᒃᑑᑎᐅᓯᒪᔪᑦ ᒪᓕᓪᓗᒋᑦ:

* ᐋᖅᑭᒋᐊᖅᑕᖅ ᒪᔾᔨ 2009 – 120 ᐊᕐᕌᒍᐃᑦ ᑭᖑᕝᕕᖅᑕᐅᓪᓗᓂ ᐆᒧᖓ 100 ᐊᕐᕌᒍᐃᑦ. 2

ᑖᒃᑯᐊ ᓈᓴᐅᑎᖏᑦ ᓂᕈᐊᕐᑕᐅᓚᐅᖅᑐᑦ ᓇᓚᐅᑦᓵᕈᑕᐅᓪᓗᒃᑎ ᖃᓄᐃᓕᖓᒐᔭᓐᖑᐊᕐᒪᖔᑕ ᐊᕐᕕᓂᐊᓚᐅᕐᑎᓪᓗᒋᑦ ᑐᑭᓯᔾᔪᑎᑕᐅᓇᓱᐊᕐᑐᑎᒃ.

ᐅᑭᐅᖅᑕᖅᑑᑉ ᕿᑎᐊᓄᑦ ᐅᖅᑯᐊᓄᓪᓗ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐅᖅᑯᐊᓂ ᐊᕐᕙᓂᐊᕐᖕᓂᐅᑉ ᐋᖅᑭᒃᓯᒪᓂᖓ

5

• ᑐᕌᒐᕆᔭᐅᓂᕐᓴᐅᓗᑎᒃ ᐱᕈᕇᕐᓯᒪᓐᖏᑦᑐᑦ ᐊᑯᓐᓈᕿᔪᑦ ᐊᕐᕖᑦ (≤ 13.5m ᒦᑕᑦ ᐅᕝᕙᓘᓐᓃᑦ 44.3 ᐃᓯᒐᓪᓗᐊᓂᒃ ᑕᑭᓂᓖᑦ, ᐅᕝᕙᓘᓐᓃᑦ 4.5m ᒦᑕᑦ ᐅᕝᕙᓘᓐᓃᑦ 14.8 ᐃᓯᒐᓪᓗᐊᑦ ᓂᐊᖁᖓᑕ ᓯᓕᓐᓂᖓᒍᑦ), ᐱᓗᐊᕐᑐᒥᒃ ᓯᑯᓰᓚᐅᑉ ᐃᒪᖓᓂ ᐅᐱᓐᓇᕋᓂ ᕿᑐᕐᖏᐅᕈᓐᓇᕐᑐᑦ ᐊᕐᓇᓪᓗᑦ ᑖᕙᓃᒐᔪᓐᓂᕐᓴᐅᕙᓪᓚᐃᒻᒪᑕ.

• ᐱᑦᑕᐃᓕᓗᑎᒃ ᐊᕐᕕᓂᒃ ᑕᑭᓂᕐᓴᓂᒃ 16.2m ᒦᑕᑦ ᐅᕝᕙᓘᓐᓃᑦ 53.2 ᐃᓯᒐᓪᓗᐊᑦ ᑲᑎᑦᑐᒋᑦ ᑕᑭᓂᖏᑦ (> 5.4m ᒦᑕᑦ ᐅᕝᕙᓘᓐᓃᑦ 17.7 ᐃᓯᒐᓪᓗᐊᑦ ᓂᐊᖁᖓᑕ ᓯᓕᓐᓂᖓᒍᑦ)

• ᖃᓂᓪᓕᔭᐅᓗᐊᑦᑕᐃᓕᓗᑎᒃ ᒫᕋᓛᕇᑦ (ᕿᑐᕐᖓᕇᑦ) (< 7.5m ᒦᑕᑦ ᐅᕝᕙᓘᓐᓃᑦ 24.6 ᐃᓯᒐᓪᓗᐊᑦ, ᑲᔅᑭ ᐅᓂᒃᑳᖏᓐᓂᒃ et al. 1993)

ᐊᓯᖏᑦ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑎᒃᓴᑦ

ᑕᑭᓂᓪᓚᒃᑖᑯᓗᖏᑦ ᐊᕐᕖᑦ ᐱᔭᕆᐊᑐᓪᓚᕆᒻᒪᑕ ᖃᐅᔨᓇᓱᒋᐊᖏᑦ ᐃᒪᕐᒦᓐᓂᖏᓐᓂ ᑭᓯᐊᓂᓕ ᑐᖁᖓᔪᑦ ᑕᑭᓂᖏᑦ ᐅᖓᑖᓃᕌᔪᐸᑦᑐᑦ 1/3ᓗᐊᒥᒃ ᑲᑎᓪᓗᒍ ᑕᑭᓂᖏᑦ ᐊᕐᕖᑦ (ᕼᐊᑎᒪᓐ ᐊᒻᒪ ᑕᕐᐸᓚᐃ 1993). ᒪᓕᒃᑕᐅᒐᔪᒃᑐᖅ ᒥᒃᓴᐅᓴᑎᓪᓗᒋᑦ ᑕᑭᓂᖏᓐᓂᒃ ᐊᕐᕕᒃ ᐃᒫᓃᑦᑑᑉ ᑕᑭᓂᒋᒐᔭᓐᖑᐊᕐᑕ ᖃᐅᔨᔭᐅᔪᓐᓇᕐᑐᖅ ᑕᐃᒫᒃ ᓂᐊᖁᖓᑕ ᓯᓕᓐᓂᖓ ᐱᖓᓱᐃᕐᓱᓪᓗᐊᕈᕕᐅᒃ ᑕᐃᒪᓐᓇᑎᒋ ᑕᑭᑎᒋᒐᔭᓐᖑᐊᕐᑐᖅ, ᐆᒃᑐᖅᑕᐅᔪᓐᓇᕐᑐᑦ ᑐᑭᓗᐊᓪᓗᐊᕐᓗᒍ ᐆᒃᑑᑦ ᐱᒋᐊᕐᓗᒍ ᖁᓪᓕᐅᑉ ᐊᓪᓕᕈᖓᑕ ᐃᓱᓪᓗᐊᖓᓂᒃ ᑎᑭᓪᓗᒍ “ᖁᖓᓯᖓᓄᑦ” ᐅᕝᕙᓘᓐᓃᑦ ᓱᕐᓗᐊᑕ ᑐᓄᓱᓪᓗᐊᖓᑕᓗ ᐊᑯᓐᓂᖓᓃᑦᑐᖅ ᖁᖓᓯᖓᑕ ᑭᓪᓕᖓᑕ ᖃᑦᓯᓂᖓ.

ᑐᑭᓯᒋᐊᕐᕕᐅᓯᒪᔪᑦ ᐅᓂᒃᑳᑦ

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