DECEMBER 2003 NEWSLETTER

Watts Bridge Memorial Airfield, Silverleaves Road, via Toogoolawah Qld

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PRESIDENT: Michael Smith (07) 3206-3548 SECRETARY: Glenda Faint (07) 3818-1988

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WE'VE ALWAYS DONE IT THAT WAY !!



Does the statement, "We've always done it that way" ring any bells?

The US standard railroad gauge (distance between the rails) is 4'-81/2" That's an exceedingly odd number.

Why was that gauge used?: Because that's the way they built them in England, and English expatriates built the US Railroads.

Why did the Englishbuild them like that? Because the first rail lines were built by the same people who built the pre-railroad tramways, and that's the gauge they used.

Why did "they" use that gauge then? Because the people who built the tramways used the same jigs and tools that they used for building wagons, which used that wheel spacing.

Okay! Why did the wagons have that particular odd wheel spacing? Well, if they tried to use any other spacing, the wagon wheels would break on some of the old, long distance roads in England, because that's the spacing of the wheel ruts.

So who built those old rutted roads? Imperial Rome built the first long distance roads in Europe (and England) for their legions. The roads have been used ever since.

And the ruts in the roads? Roman war chariots formed the initial ruts, which everyone else had to match for fear of destroying their wagon wheels. Since the chariots were made for Imperial Rome, they were all alike in the matter of wheel spacing. The United States standard railroad gauge of 4'-8½". is derived from the original specifications for an Imperial Roman war chariot. And bureaucracies live forever.

So the next time you are handed a spec and told we have always done it that way and wonder what *horse's ass* came up with that, you may be exactly right, because the Imperial Roman war chariots were made just wide enough to accommodate the back ends of two war horses.

Now the twist to the story... When you see a Space Shuttle sitting on its launch pad, there are two big booster rockets attached to the sides of the main fuel tank. These are solid rocket boosters, or SRBs. The SRBs are made by Thiokol at their factory in Utah. The engineers who designed the SRBs would have preferred to make them a bit fatter, but the SRBs had to be shipped by train from the factory to the launch site. The railroad line from the factory happens to run through a tunnel in the mountains. The SRBs had to fit through that tunnel. The tunnel is slightly wider than the railroad track, and the railroad track, as you now know, is about as wide as two horses' behinds

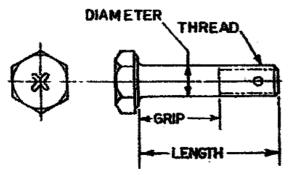
So, a major Space Shuttle design feature of what is arguably the world's most advanced transportation system was determined over two thousand years ago by the width of a horse's ass.!!



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SPECIFYING AIRCRAFT BOLTS

AN3 - AN4 - AN5

	AN3 [3/16"]		AN4 [1/4"]		AN5 [5/16"]	
DASH No.	GRIP ± 1/64"	LENGTH +1/32" -1/64"	GRIP ± 1/64"	LENGTH +1/32" -1/64"	GRIP ± 1/64"	LENGTH +1/32" -1/64"
-3A -4A -5A	1/16" 1/8" 1/4"	15/32" 17/32" 21/32"	1/16" 1/16" 3/16"	15/32" 17/32" 21/32"	1/16" 3/16"	19/32" 23/32"
-6A	3/8"	25/32"	5/16"	25/32"	5/16"	27/32"
-7A	1/2"	29/32"	7/16"	29/32"	7/16"	31/32"
-10A	5/8"	1 1/32"	9/16"	1 1/32"	9/16"	1 3/32"
-11A	3/4"	1 5/32"	11/16"	1 5/32"	11/16"	1 7/32"
-12A	7/8"	1 9/32"	13/16"	1 9/32"	13/16"	1 11/32"
-13A	1"	1 13/32"	15/16"	1 13/32"	15/16"	1 15/32"
-14A	1 1/8"	1 17/32"	1 1/16"	1 17/32"	1 1/16"	1 19/32"
-15A	1 1/4"	1 21/32"	1 3/16"	1 21/32"	1 3/16"	1 23/32"
-16A	1 3/8"	1 25/32"	1 5/16"	1 25/32"	1 5/16"	1 27/32"
-17A	1 1/2"	1 29/32"	1 7/16"	1 29/32"	1 7/16"	1 31/32"
-20A	1 5/8"	2 1/32"	1 9/16"	2 1/32"	1 9/16"	2 3/32"
-21A	1 3/4"	2 5/32"	1 11/16"	2 5/32"	1 11/16"	2 7/32"
-22A	1 7/8"	2 9/32"	1 13/16"	2 9/32"	1 13/16"	2 11/32"
-23A	2"	2 13/32"	1 15/16"	2 13/32"	1 15/16"	2 15/32"
-24A	2 1/8"	2 17/32"	2 1/16"	2 17/32"	2 1/16"	2 19/32"
-25A	2 1/4"	2 21/32"	2 3/16"	2 21/32"	2 3/16"	2 23/32"
-26A	2 3/8"	2 25/32"	2 5/16"	2 25/32"	2 5/16"	2 27/32"
-27A	2 1/2"	2 29/32"	2 7/16"	2 29/32"	2 7/16"	2 31/32"
-30A	2 5/8"	3 1/32"	2 9/16"	3 1/32"	2 9/16"	3 3/32"

Bolt Diameter Specified by the AN Number. (See Chart above)

Adding an **H** to the AN Number specifies a Drilled Head for lock wiring Adding a **C** to the AN Number specifies the bolt is to be Stainless Steel.

Bolt Length Specified by the Dash No. (See Chart above)

Adding an "A" to the Dash No. specifies an Undrilled Shank

EXAMPLES

AN4-10A Specifies a 1/4" Dia Bolt x 1 1/32" Long with an undrilled head and shank Specifies a 5/16" Dia Bolt x 1 23/32" Long with a drilled head and undrilled shank Specifies a 3/16" Dia Bolt x 25/32" Long with an undrilled head and a drilled shank

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MINUTES OF MEETING

NOVEMBER 2003 - MEETING OPENED AT 8.02PM.

MEMBERS PRESENT 14

APOLOGIES Cec Lea, John and Tanys McCarron

VISITORS Alice Purcell, Robin Salisbury.

CHAIR Mike Smith

MINUTES OF PREVIOUS MEETING

Accepted as true and correct

Moved: Bevan Dryden Seconded: Peter Frazer

SECRETARY'S REPORT Nil

TREASURER'S REPORT Account Balance: \$15,822.59

Moved: Richard Sweetapple Seconded: Lloyd Salisbury

A.U.F. REPORT

A.U.F. Name change will probably be put to a vote by members next April or May. Australian Warbirds have approached the A.U.F. asking the A.U.F. to manage their Data Base. S.A.A.A. Wrote to the A.U.F. about General Aviation Flying Schools issuing A.U.F. licences. S.A.A.A. cannot issue Sports Licence. S.A.A.A. is undermining the A.U.F. Fatality Rate. Stall spins causing too many fatalities. Incident Reports all going into Magazine.

SOCIAL DIRECTORS REPORT

Combined Watts Bridge Groups' Christmas Party, 13th December, at Watts Bridge Airfield. Heck Field Christmas Party Weekend: 6th & 7th December, 2003. Party 6PM Saturday.

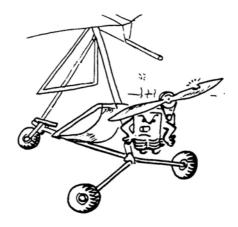
GENERAL BUSINESS

Feedback re Monthly Newsletter - Paper Copy or Email.

Every one receiving Email prefers it that way. Some people having trouble down loading. Editor pleads: Please keep articles coming so there is content in the Newsletter. Don Mellow is having Jabiru engine overheating problems. Topic discussed

Hangar Owners advised to check gutters with high winds. Screw or 1/8"rivit into clips.

THANKS TO MRS SALISBURY FOR SUPPER MEETING CLOSED 8.55PM



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