



# CHALLENGES OF SPECIAL MEASURE GARMENTS FOR FUNCTIONAL CLOTHING

NORMA STAPLES 31<sup>st</sup> MARCH 2015



Alternative to  
underwear



Cooling  
Garment



Underwear,  
Upper and  
Lower



Thermal  
Protection Layer

Alternative for  
Winter Requirement



Lightweight  
Coverall



Cold Water  
Immersion  
Garment



Cold Water  
Immersion Cooling  
Garment Breakout



Skeletal  
Anti-G  
Trousers



Full Coverage  
Anti-g Garment



Chemical &  
Biological  
Protective Layer



Chemical &  
Biological Protective  
Layer (Transit use  
optional)



Flight Jacket,  
Sleeved/Sleeveless



Arm Restraint



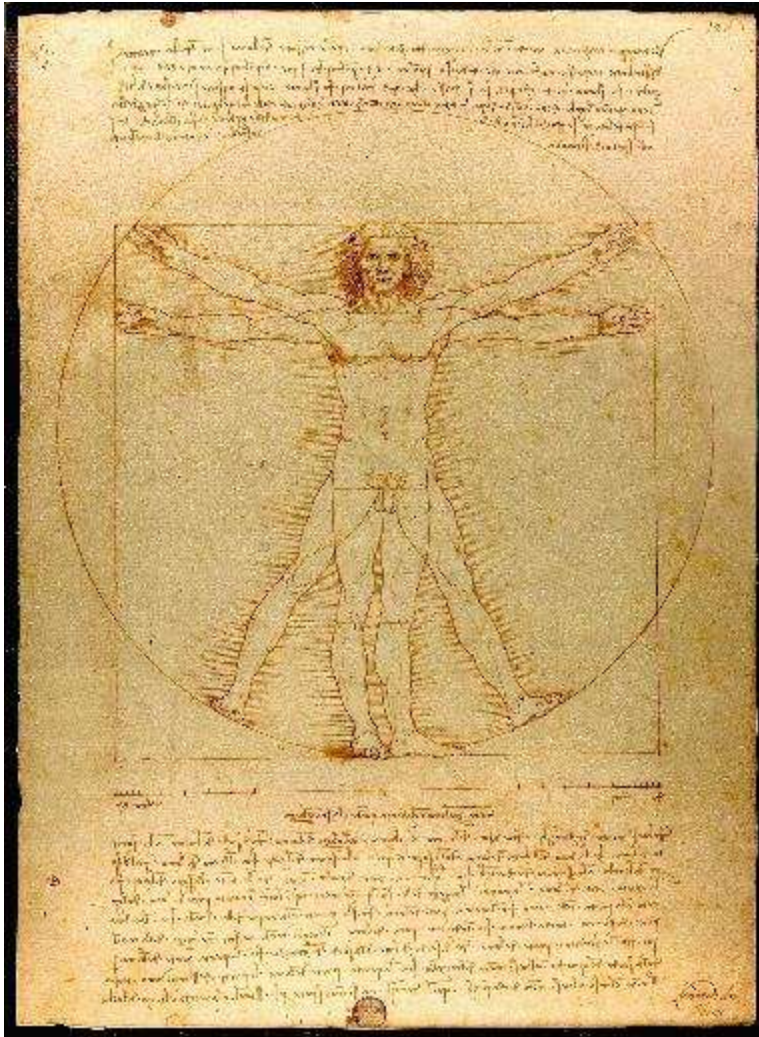
# Standard Sizes

Size Rolls Parameters  
Height 150cms-200cms  
Chest 76cms -131cms



So why do we need  
special measures?

# Size Rolls



- Size rolls are built on averages
- Pattern sizes are based on

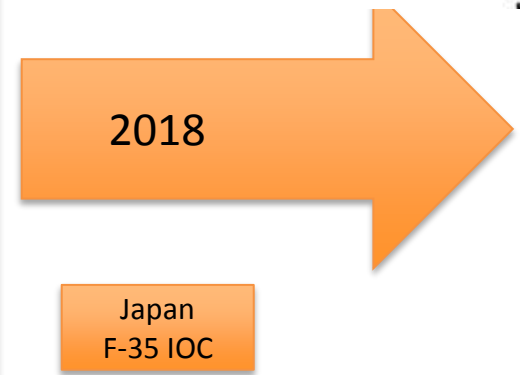
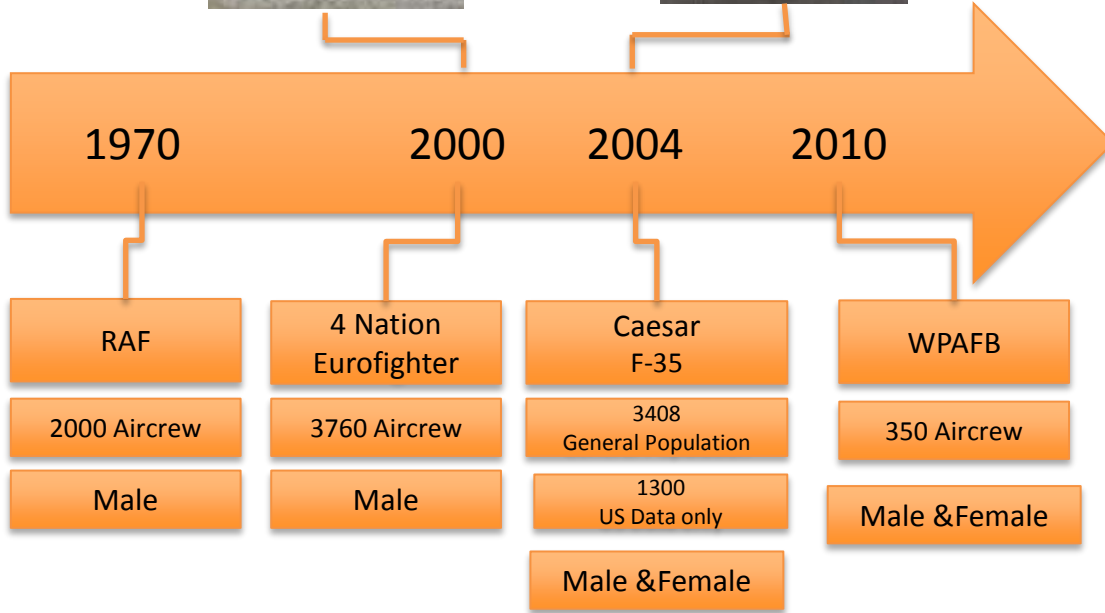
**“STANDARD BODY MEASUREMENTS”**

Historically basic block patterns are drafted using a proportionate system.

# Selective fit or Special Measure?

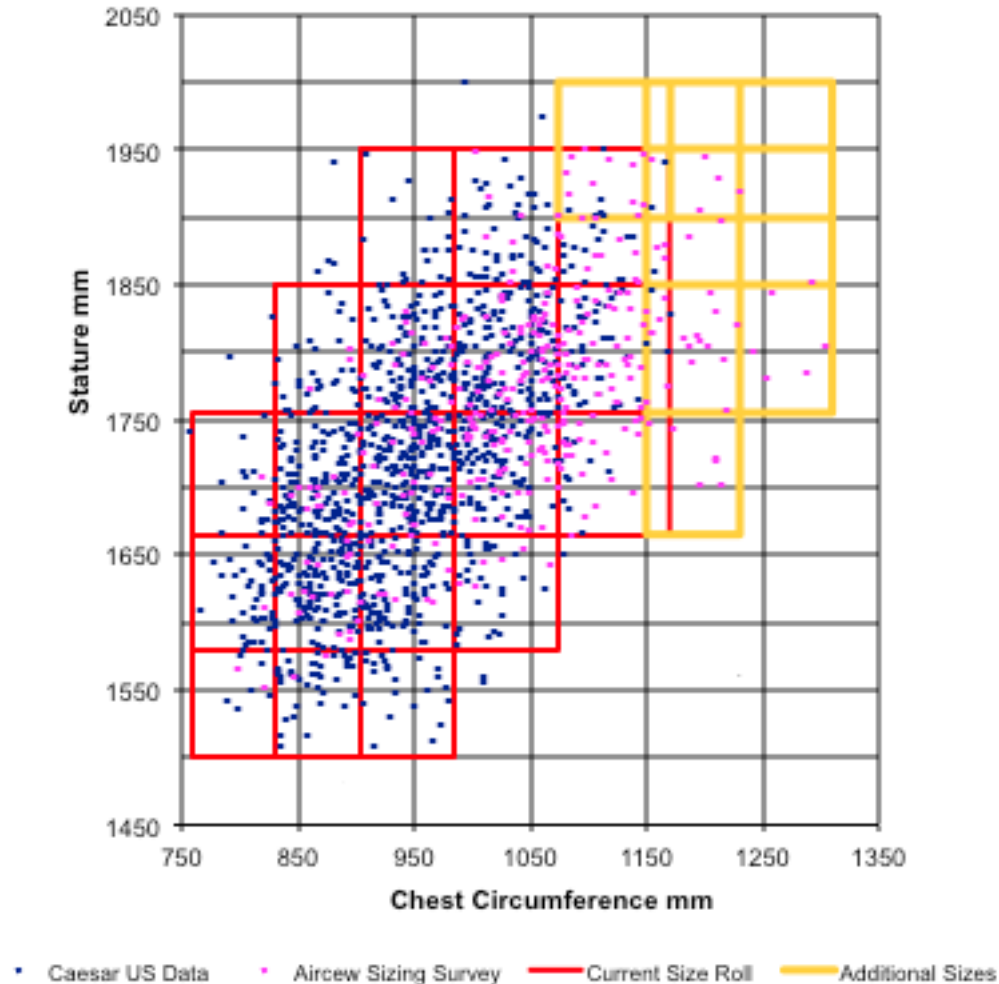


# Databases



# Statistical analysis of the database

JSF Full Body Garments





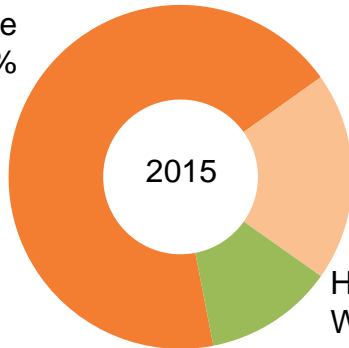
# New Challenges for Special Measures

**3899**  
suits fitted this year

Special Measure suit 0.6%  
Customised suit 1.8%

## OUT OF THE 1.8% “CUSTOMISED SUITS”

Boot size  
change  
73%



Hood/Neck  
Wrist increase  
21%

Hood/Neck  
Wrist decrease  
13%



4 balaclava sizes

22 standard stock sizes  
10 Special stock sizes

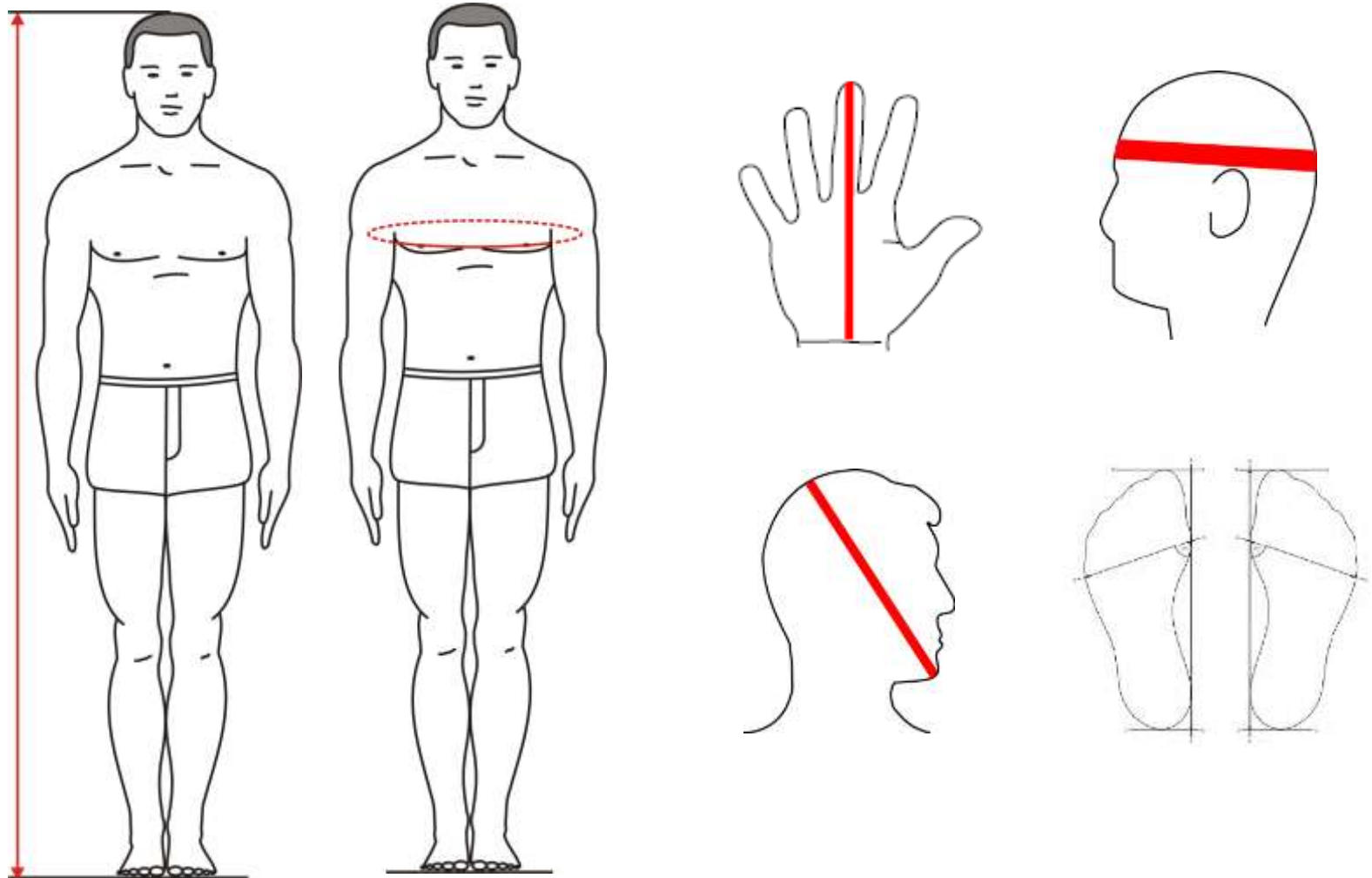


4 Glove sizes

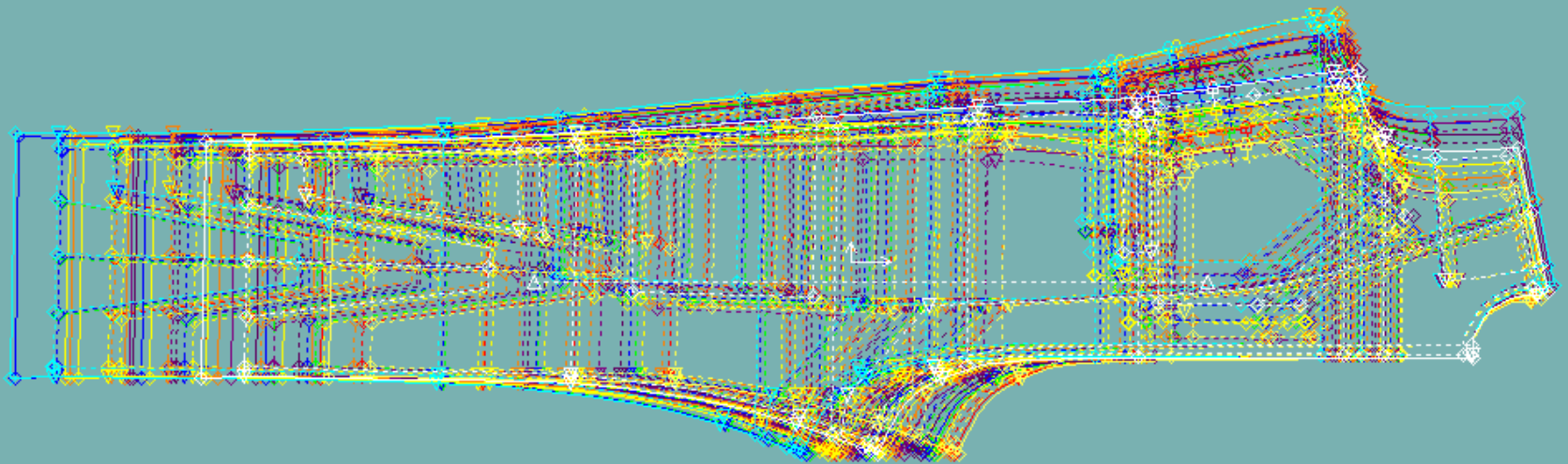
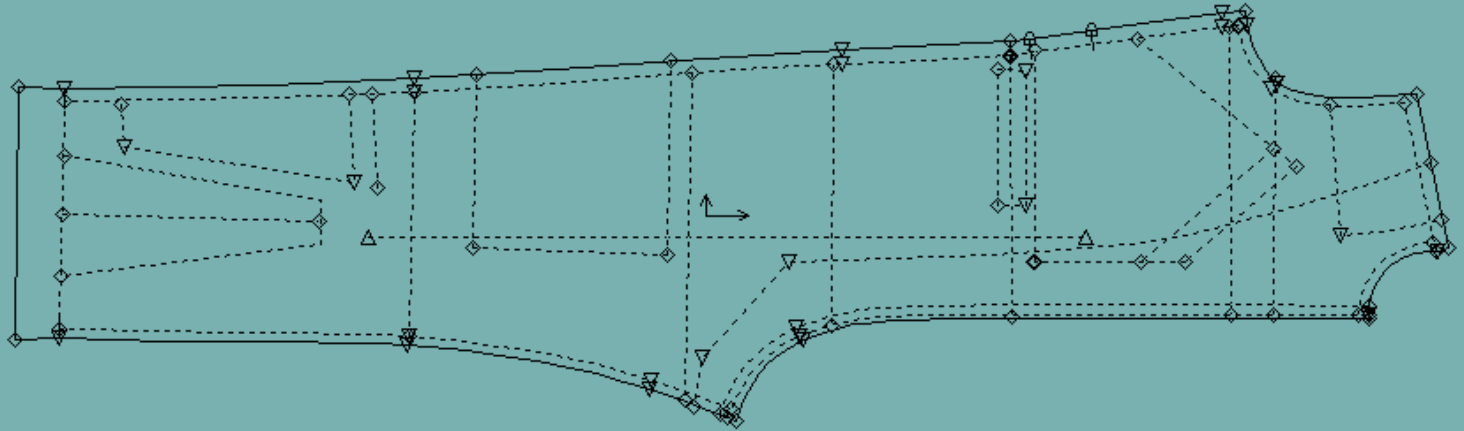


7 Boot sizes

# Accurate Data Collection is Fundamental



# Computerised pattern profiles.



# Keys to Success

Knowledge of garment design and the fit criteria

An understanding of anthropometrics

Accurate, standardised data collection

Know how to apply anthropometrics to the pattern pieces



# Thank you for Listening

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