## Mirce Mechanics Foundation School on

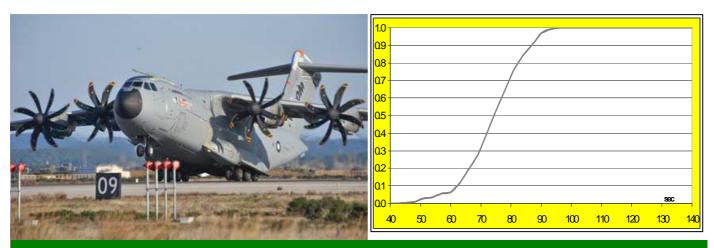
# **Time To Support – TTS**

Science based method for accurate predictions of Time To Support or Logistics Delay Time

#### MIRCE Akademy, Woodbury Park, Exeter, United Kingdom

At the MIRCE Akademy we have systematically observed the motion of machines through the support process through their in-service life. We have analysed the sequence of the flow of comprising support tasks in order understand their physical mechanisms and the dynamics of the motion of these tasks through the life of a large number of machines. Finally, their physical relationships have been captured and described through mathematical formulas that enable accurate predictions of their future trajectories to be made. This has given birth to the *Mirce Science, the scientific theory of the motion of functionability through the life of maintainable systems.* 

The main objective of this Foundation School is to present the concept, main principles and equations of the Mirce Mechanics that are directly related to the prediction of the Support Process measures, that includes the Mean Time To Support (MTTS), related to the Support tasks such as: transportation, storage, ordering, packaging, handling, spares provisioning, initial and replenishing training, locating repair and testing facilities and many, many more, in different geographical locations, environmental conditions and the types of operational scenarios under which a machine is expected to perform.



Both support mechanisms are probable and predictable





Programme: Day 1			
	08.00 - 09.00 Registration		
09.00-10.30	Machine In-service Life and Support: Process		
	Support Tasks:		
	Concept, Types, Resources, Constraints, Cost & Effectiveness		
	10.30 - 11.00 - Tea/Coffee		
11.00-13.00	Support Task Performance Measures:		
	Supportability Function, Expected Duration of Task, Percentual Duration of Task, Maximum and Minimum Duration, Direct and Indirect Cost and Support Effectiveness		
	13.00 - 14.00 Lunch		
14.00-15.30	Experimental Determination of Support Task Measures		
1 1.00 10.00	Statistical Evaluation of the Duration of Support Task based on the Existing Field or Test Data		
	15.30 - 16.00 Afternoon Tea		
16.00-17.30	Case Study: Formula 1: Support Process		
	Presentation dedicated to the unique Support Process provided for the Formula 1 Teams,		
	followed by a guided tour of the Auto Racing Championship Centre of the MIRCE Akademy		
Programme: Day 2			
09.00-10.30	Mechanics of Sequential Support Tasks		
	Concept, Definition, Supportability Function, Performance Measures, Case Study		
	10.30 - 11.00 - Tea/Coffee		
11.00-13.00	Mechanics of Simultaneous Support Tasks		
	Concept, Definition, Supportability Function, Performance Measures, Case Study		
	13.00 - 14.00 Lunch		
14.00-15.30	Mechanics of Complex Support Tasks		
	Concept, Definition, Supportability Function, Performance Measures, Case Study 15.30 - 16.00 Afternoon Tea		
16.00-17.30	"Hands-On" practical exercise		
10.00-17.30	Quantitative assessment of the impact of the system engineering alternatives on support task		
	performance, cost and effectiveness, reviewed at the conceptual stage of a machine design		
	Programme: Day 3		
09.00-10.30	Human Impact on Mechanics of Support Process		
07.00 10.50	Human Characteristics and Limitation		
	Human Variability: physiology, culture, language, education, tradition		
	10.30 - 11.00 - Tea/Coffee		
11.00-12.30	Environmental Impact on Mechanics of Support Process		
	Geographical Location:: on Earth: Latitude, Longitude, Altitude in Space		
	Climatic Conditions: Temperature, Humidity, Wind, Solar Radiation, Hail, Rain, Snow, etc.		
12 20 15 00	12.30 - 13.30 Lunch		
13.30-15.00	Organisational Impact on Mechanics of Support Process First Line Support Structure		
	Intermediate Support Structure		
	Depot Support Structure		
	Producer driven Support Schemes		
	15.00 - 15.30 Afternoon Tea		
15.30–17.00,	Quantitative Assessment of the Human, Environmental and Organisational		
	Impact on Mechanics of Support Task Dynamics, Cost and Effectiveness Numerical, Multi Level - Multi Indenture - Case Study		
	Numericar, Multi Level - Multi indentuic - Case Study		

Topics to be covered, explained, clarified and illustrated with numerical examples and case studies

The physical meaning of ..... • The mathematical meaning of ..... ۲ The engineering meaning of ..... The management meaning of .....  $\bullet$ The customers understanding of .....  $\bullet$ The accuracy of cost predictions based on ..... • The accuracy of spares predictions based on ..... • The accuracy of maintenance planning based on ..... • The accuracy of facilities planning based on ..... • The accuracy of cost predictions based on ..... •

All of the above and other MTTS driven issues with be addressed in respect to:

- o Component
- o Module
- o Subsystem
- o System
- o Platform
- o Fleet



The International School will be held at Woodbury Park Hotel, Golf and Country Club, 8 miles from Exeter.

Communication between Exeter and other parts of the United Kingdom are excellent.

**By road**, the M5 motorway links Exeter to London, the Midlands, Scotland and Wales. Regular rapid coaches run services to and from London and Heathrow Airport.

**By rail**, a regular fast service is available to and from Exeter (St David's Station) and London (Paddington or Waterloo Station - connection to Euro Star).

**By air**, Exeter Airport offers regular flights to many British and Continental destinations and is situated near to Woodbury Park. Travel between Exeter and Woodbury normally requires a car or taxi.

Delegates are responsible for the arrangement and payment of their own travel and accommodation. Delegates wishing to take advantage of preferential room rates should contact Woodbury Park Hotel Reservations quoting 'MIRCE'.

Woodbury Park Hotel, Golf and Country Club, Woodbury, Exeter, EX5 1JJ, United Kingdom



**Dr Jezdimir Knezevic**, the host of the School is the "father" of the Mirce Mechanics and the Founder and President of the MIRCE Akademy. He has been experiencing the complexity and the dynamics of support tasks since the age of 13, as a teenager who "lived for rallying". His multi disciplinary theoretical knowledge, huge industrial experience and an endless passion for the subject have attracted over 5000 engineers, managers, analysts and students to his courses and educational programmes in over 40 countries in Europe, North and South America, Australia, Asia and Africa, at universities, professional institutions, industry and government.

### **Mirce Mechanics Foundation School**

#### **Registration Form**

Phone +44 (0) 1395 233 856 Mail MIRCE Akademy, Woodbury Park, Woodbury, Exeter, EX5 1JJ, United Kingdom **Email:** <u>quest@mirceakademy.com</u> Web site: www.mirceakademy.com

#### THIS FORM MAY BE PHOTOCOPIED

International School Prices (in GB Pounds £)				
		Fee	VAT	Payable
•	Participants	950.00	190.00	1140.00
•	Fellows of MAk	900.00	180.00	1080.00
•	<b>Members of MAk</b>	850.00	170.00	1020.00
•	Students of MAk	750.00	150.00	900.00

#### The Price includes:

- Tuition
- **Supporting Materials**
- Lunches
- Light Refreshments

#### Value Added Tax (VAT)

Unless special exemption exists, under UK Customs and Excise regulations delegates from all countries are required to pay UK VAT @ 20 % on all courses taking place in the UK. Non-UK delegates may be able to recover VAT incurred via the relevant tax authority in the country of origin of the delegate.

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I understand and accept the registration terms and conditions as shown				
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Substitution of participants may be made at any time. If you intend to do this, please advise the MIRCE Akademy ('the organiser') as soon as possible. Cancellation of a				

booking must be received in writing by the organiser at least 14 days before the commencement of the International School. MIRCE Akademy regrets that no refunds or credits will be made after the deadline unless the organiser cancels the Event.

The organiser reserves the right to alter the programme or cancel the International School at its discretion. All places offered are subject to availability.