

## Closing Remarks

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Lt.-Col Fiamingo, honored attendees; this has been a very productive and enlightening two days. I am grateful to our sponsors, the NATO Research and Technology Organization and the Sensors and Electronic Technology Panel, and to its hard-working and dedicated staff, for making this possible. Thank you, Lt.-Col Guiseppe Fiamingo and local coordinators Dr. Odman, Sweden; Mr. Muranyi, Hungary; Lt. Col. Lillo, Italy for the outstanding effort to make the LS team's job easier and for the many courtesies shown over the past several days. I also want to very much offer a sincere word of appreciation to all the people who are listed as staff and technical support in the programs in the list of participants: To Jane Brooks of the Research and Technology Agency staff; to Stephanie Branch of the Sensors and Electronic Technology Panel, who did such an able job with the many administrative tasks; I also want to thank all of our speakers, all of whom have very responsible jobs; this is a very significant devotion of their time taking themselves away from their daily routine to spend these two days with us in these discussions. That is very much appreciated. You were just great and provided us with superb presentations over the last few days and some great questions and responses and I think it has been very stimulating. Thank you for informing us, inspiring us, and entertaining us. Finally, I wish to thank the audience here today for your participation, attentiveness, and your excellent contribution to the success of this LS. Let's give ourselves a round of applause.

I would also like to note the involvement and exceptional support of Lt-Col Arturo Salzano, Lt-Col Fiamingo's predecessor as SET Panel executive. Lt-Col Salzano's early support was crucial in getting approval and funding for this LS. For that, I am indebted.

I had contemplated giving you a summary of each of the lectures with what I thought were the most pertinent points, but I think that would in itself be impertinent and redundant since people have mostly absorbed what has been said. I saw this as a starting point for the engineers and scientists of the NATO alliance to think in terms of knowledge-based techniques and I think that has been very much achieved. Many of the basics have been fleshed out, a lot of the opportunities for future implementations have been discussed and it is my hope that each of you have benefited from what has been presented here.

Over the last two days we have come a long way in understanding the potential of knowledge-based technologies for improving the performance of sensor systems. We have reviewed the fundamentals of radar systems and discussed the implementation of knowledge-based techniques in a way that clearly demonstrates the usefulness of such techniques.

Radar systems are an important component of NATO military operations. In response to increasingly severe threats from military targets with reduced radar cross sections, slow moving and low flying targets, targets

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hidden in foliage and under trees, and in environments with large numbers of targets, knowledge-based (KB) signal and data processing techniques offer promise of significantly improved performance of NATO operated radar systems. In addition, radar systems under knowledge-based control can be deployed to better utilize valuable resources such as air space and runways and aid human operators in carrying out their missions. As battlefield scenarios become more complex with ever growing numbers of sensors and weapon systems, the challenge will be to effectively use already available information to enhance radar performance. Knowledge-based processing fills this need and helps meet the challenge.

The objective of this Lecture Series was to present a state-of-the-art assessment of knowledge-based radar signal and data processing techniques, and thereby increase awareness of their value to the NATO scientific community. We reviewed the current developments in the area and presented examples of improved radar performance for augmented and upgraded systems, and projected the impact of KB technology on future systems.

It is certain that many more things could be listed, but it is late in the day. The spirit of cooperation continues and we have much work to do together.

What a pleasure it has been to meet with you for the past two days and to participate in this outstanding interchange of ideas and concepts which we expect to be important to the NATO and its members. Thank you all for your participation in this Lecture Series and, for the many of you who have come long distances, I wish you a safe journey back to your homes.

Thank you for coming.

I declare the Lecture Series adjourned.