

Toward Self-Sufficiency

R.S.A.F. Transformation Plan

In the wake of Operation Desert Storm, the regulations governing western involvement in Saudi military actions changed dramatically. For years, the Royal Saudi Air Force had relied on western allies to generate and fly training sorties. It was hoped that this same relationship would help carry the R.S.A.F. into the 21st century. However, shortly after Operation Desert Storm, the U.S. State Department announced U.S. personnel would not be allowed to fly war time sorties. This restriction left a void in the R.S.A.F. flight line capabilities and underscored the importance of transforming the Royal Saudi Air Force from an organization dependant on western technical aid and support to one that is independent and self-sufficient.

Developing an independently strong, capable and ready flight line requires a re-training strategy that would create a solid foundation for the future without compromising R.S.A.F.'s present capabilities. This paper analyzes the attempts R.S.A.F. has made toward this end and offers recommendations to facilitate a successful transformation. It should be emphasized that the suggestions in this report do not represent solutions in their entirety but a framework within which the solutions can be designed.

Analysis of the R.S.A.F. Readiness Plan

In the early years of the Peace Sun Program the R.S.A.F. implemented an F-15 training program administered by the USAF. Under the R.S.A.F. Readiness Plan (RRP), Saudi personnel received both classroom and field training that was guided by USAF quality assurance personnel. The U.S. trainers shadowed Saudi personnel in the field and, once Saudi personnel had demonstrated an acceptable level of proficiency in their specified area, the U.S. trainer would certify them as having completed their training.

The RRP was a thorough program that enabled young Saudi airmen to become technically capable of conducting flight line operations. By 1985, R.S.A.F. was well on its way to becoming self-sufficient.

Then, in 1986, R.S.A.F. began to analyze the RRP in terms of cost and progress toward the ultimate goal of self-sufficiency. R.S.A.F. command concluded that while the program was indeed thorough and effective, it was also expensive, requiring several USAF trainers for every R.S.A.F. personnel. Moreover, the RRP placed limitations on how much control R.S.A.F. exercised. So long as the plan relied on U.S. personnel to manage the training, R.S.A.F. would remain dependent on U.S. oversight. For these reasons, R.S.A.F. opted to terminate the RRP in favor of another approach.

Directed Manning

The new concept, initiated in 1987, became known as the Directed Manning approach. In the Directed Manning concept, the roles of the Saudi and U.S. expatriate personnel were

reversed. R.S.A.F. officers, trained under the RRP, were deployed as field supervisors who directed the efforts of technical and support teams. These teams were composed of un-trained Saudi nationals working alongside skilled U.S. expatriates. The expatriates' function was to not only perform the work needed, but to train the un-skilled Saudis to eventually be able to perform the same tasks.

However, problems in the Directed Manning concept became apparent from the beginning. Shortly after converting to Directed Manning the R.S.A.F. also adopted the Peace Sentinel, and Peace Shield initiatives. To deploy resources towards these new programs, R.S.A.F. re-assigned many of its top officers, pulling them off the F-15 program. Without an adequate number of trained personnel to fill the vacancies, the Peace Sun program suffered from a lack of leadership.

More importantly, the Directed Manning concept provided little or no incentive for Saudi technicians to develop the skills needed to assume responsibility of flight line operations. Saudi trainees had skilled U.S. counterparts who were both willing and able to perform the needed tasks, essentially relieving the Saudi nationals of any responsibilities. As for the U.S. expatriates, training their Saudi co-workers could mean working themselves out of a job.

In the end, obstacles such as these prevented the Directed Manning concept from providing the self-sufficiency and cost-savings it was designed to deliver. Despite its lack of success, three critical lessons can be learned from the Directed Manning approach.

First, if R.S.A.F. is to be wholly self-sustaining, a structured and formalized training program must be implemented. Simply placing Saudi personnel alongside U.S. expatriates is not enough to transfer the necessary skills from one to the other. Contrast this with the rigorous training program under the RRP. While costly, the program succeeded in developing a cadre of highly-trained and qualified officers who have learned to manage flight line readiness under some of the most adverse conditions since formation of the R.S.A.F.

Secondly, this formalized training must be forced upon the un-skilled Saudi nationals. They will not embrace it willingly. After ten years of having western personnel perform their jobs, un-skilled Saudi personnel have become all too complacent. Part of this complacency may be due to the fact that the typical Saudi technician neither understands nor appreciates the ultimate goal of his training – to develop a completely self-sufficient air force capable of protecting the country's interests.

Finally, R.S.A.F. must make a long-term commitment to the F-15 program. This involves dedicating a critical mass of trained Saudi personnel to the program, including qualified technicians and seasoned officers.

A somewhat modified version of the Directed Manning approach is now being introduced in which the U.S. expatriates are being replaced with Saudi Nationals. The concept calls for Saudis to train Saudis under the management of Saudis. It is the very definition of

self-sufficiency and the ultimate goal of the Royal Saudi Air Force. However, without enough qualified trainers, this plan has little chance to succeed as well.

R.S.A.F. Transformation Team: The Best of the Past and Future.

Given the successes, failures and lessons of the past, the ideal program would use the core of well-trained R.S.A.F. officers to develop a thoughtful and well-planned strategy for sustainable growth that relies less and less on outside resources.

Based on these requirements, we recommend a new strategy of transformation. Under this approach, skilled R.S.A.F. logistics officers - trained under the RRP and representing all appropriate logistics disciplines – would form the nucleus of an R.S.A.F. Transformation Team and be tasked with identifying basic needs and developing the road map to lead the R.S.A.F. in to the next decade.

The Transformation Team would be responsible for conducting a detailed overall analysis of R.S.A.F. plans, programs, and functions. This would include analyzing the detailed planning processes and identifying the objectives and goals of each specific function.

Given the lack of qualified logistics officers, it is expected that the R.S.A.F. will need to call on outside contractors to serve on the Transformation Team. Selection of the right contractor is critical. Great care must be taken to ensure that the contractor's only goal is

to assist the R.S.A.F. and the Saudi Arabian Government in achieving independent sustainability.

Once the Transformation Team has formulated its overall recommendations, sub-teams would be formed, by Directorate, to analyze in more detail their specific needs and processes. The Directorates to be analyzed include Training, Computing, Maintenance and Engineering, Supply, Contracting, Transportation, and Operations. Again, outside contractors may be used to round out each Directorate team.

The remainder of this paper focuses on implementing the concept of the Transformation Team. It analyzes three major areas: Maintenance and Engineering, Supply, and Training. The first area, Maintenance and Engineering, is used as an example to illustrate the level of analysis that should be conducted within each Directorate. The second and third areas offer specific recommendations on steps the R.S.A.F. can take to maintain flight line readiness while continuing down the road to independent sustainability. It should be emphasized that these recommendations should be viewed as a general framework that should be refined to best suit the needs of each individual directorate.

#1. Maintenance

We began by establishing a goal of maintaining 100% availability of the F-15 weapon system for the war fighter. Employing the Transformation Team approach, the following areas within the Maintenance and Engineering Directorate would be targeted for analysis.

Major Tasking for Flight line Maintenance

1. Accomplish aircraft servicing and inspections such as preflight, thru flights, and post flights to ensure aircraft airworthiness.
2. Launch and recover aircraft.
3. Perform end of runway operations for a last look before and after flight.
4. Load aircraft with various munitions according to the mission.
5. Conduct debriefing after flight to document malfunctions and update records.
6. Troubleshoot and repair malfunctions and accomplish modifications.
7. Maintain a support section to obtain required parts, tools, technical data, and test equipment.
8. Perform aircraft cleaning and corrosion control operations.

Personnel Required for Flight line Operations

1. Crew chiefs/Aircraft maintenance specialist
2. Aircraft armament systems specialist
3. Aircraft avionics systems specialist (A shop)
4. Aircraft avionics systems specialist (B shop)
5. Aircraft avionics systems specialist (C shop)
6. Aircraft electrical systems specialist
7. Aircraft environmental control systems specialist
8. Aircraft engines systems specialist
9. Aircraft hydraulics systems specialist
10. Material Control specialist
11. Maintenance management personnel to supervise the operations, including Production Supervisors, Flight line Expeditors and Flight chiefs.

General Issues to be Considered

1. Are the tasking adequate to support our goal?
2. Do we need to add additional tasking?
3. Can we combine current tasking?
4. Can this tasking be out sourced?
5. Do we have the required AFSC's to adequately address the assigned tasks?
6. Do our personnel fulfill all the requirements within each assigned AFSC?
7. Is there currently sufficient work to keep the individual's certified in all AFSC's?
8. Do we have an adequate training plan?

#2 Supply

Any analysis of the R.S.A.F. warfighter supply chain must begin with AUTOLOG, the R.S.A.F. proprietary automated inventory tracking system. Initially developed in the 1980s, the AUTOLOG system has undergone several upgrades. Despite the upgrades, the AUTOLOG System has exhibited a limited ability to incorporate new technology and methodologies.

Additionally, decentralized growth of the R.S.A.F. supply program has resulted in numerous redundancies in both facilities and support personnel. Streamlining the overall supply system will dramatically help improve supply response and efficiency.

It is along these lines that we have identified the following challenges and recommend the following improvements.

Challenge: AUTOLOG's functionality has not kept pace with the evolving needs of the R.S.A.F. supply system or basic mission requirements. Only half of the 600,000+ items that AUTOLOG supports are considered relevant within the R.S.A.F. inventory. Well over half of the relevant inventory has been completely inactive over the past five years.

Recommendation: Conduct an extensive study to identify items whose demand does not justify the cost of oversight and reduce the R.S.A.F. inventory to only those essential R.S.A.F. items. To do this, it is suggested that R.S.A.F. remove items that have been inactive for five or more years. These excess items could be offered for sale through the World Wide Warehouse (WWW) or disposed of through various commercial avenues.

Streamlining the supply items would not only decrease inventory cost, it would also maximize utilization of R.S.A.F. personnel.

Challenge: Considerable ambiguity exists between AUTOLOG and the Security Assistance Management Information System (SAMIS), which makes an accurate assessment of the R.S.A.F. supply support extremely difficult. AUTOLOG shows due-ins that are not supported by SAMIS records and SAMIS shows transactions that are unsupported by AUTOLOG. The variances are estimated at 30 to 50%.

Recommendations: Depot Supply should conduct a comprehensive review of these differences and areas of possible conflict should be identified within the AUTOLOG and SAMIS systems. Resolution of these variances must be a priority as accurate supply information is critical to the success of the overall R.S.A.F. mission.

Challenge: Multiple and decentralized supply depots throughout the Saudi kingdom require a duplication of effort and expense in order to support various R.S.A.F. weapon systems.

Recommendation: Develop a plan to consolidate all inventory control and management functions at one central location. A similar solution was implemented within the USAF that reduced the size of the supply squadrons by 30 to 50%. Such an action would enable the R.S.A.F. to concentrate our most experienced inventory control personnel at a single location. The centralized control and more cost-effective operation would improve supply

support to all R.S.A.F. weapons systems.

Challenge: The commonality of supply support across various R.S.A.F. weapons systems suggests that the contracting of some supply support functions may be an attractive option. However, the downside of such a program is a potential loss of control.

Recommendation: Target a single weapon system, such as the F-15, on which to test the overall feasibility of contracted supply support. Determine the exact level of contractor support prior to solicitation and gauge success or failure of the relationship based on the contractor's ability to provide the required support. If the relationship tests positive, the process can be duplicated and applied to other R.S.A.F. weapon systems. A similar effort is currently being conducted to provide consumable support to the F-15 PDM effort. Close R.S.A.F. scrutiny of the consumable support for the F-15 PDM effort should serve to validate this concept.

3. Training

The intent of this training plan is to provide a paced approach toward establishing a coherent training program that enables the R.S.A.F. to meet the technical demands of the 21st century. More specifically, it provides a strategy to allocate the personnel and money necessary to create a unified force capable of deterring aggression while sustaining operational objectives.

This plan is based on a four-step kill chain, designed to create and maintain a state of constant readiness. Like any chain, the R.S.A.F. kill chain must have all links operating and in place for it to function. Therefore, thorough training, based on each airman's specific responsibilities in the chain, is the key to the program's long-term success.

The Career Field Education and Training Plan

At the heart of the Transformation Team's training efforts is the development of the Career Field Education and Training Plan (CFETP). This comprehensive education and training document identifies life-cycle education and training requirements. Like the RRP, it establishes performance-based training standards that provide individual airmen a clear understanding of expectations and responsibilities. The CFETP also identifies the support resources and minimum specialty requirements needed. Every position, as outlined in the unit manning document, will have a CFETP to guide the airman's training and progress within his technical specialty. The clear delineation of requirements will also enable management and budgetary personnel to accurately identify and adequately fund for that specialty.

Training Strategic Plan

In addition to the CFETP, a Training Strategic Plan should be developed to guide the long range needs of the R.S.A.F.. This overall training plan must consider three key concepts: 1) Sustainability 2) Improvement and 3) Vision.

Sustainability refers to the estimated trained force needed for each weapon system. The sustainability analysis should include all training requirements and associated problems along with proposed solutions. A risk management plan should also be developed to make management aware of the future requirements as well as foreseeable problems. The **Improvement** phase incorporates the solutions developed during the Sustainability phase. The process of improvement should be recognized as continuous and dynamic. **Vision** refers to R.S.A.F. leaders' need to predict, gauge, and guide future requirements. When applied to leadership areas such as MODA and R.S.A.F. Headquarters, an adequate vision enables R.S.A.F. leaders to maintain currency and relevancy with regards to future needs.

To be successful, the formulation of the Training Strategic Plan must be an integrated effort. Using an Integrated Product Team (IPT) approach that includes key personnel from all specialty areas would ensure that all affected areas are represented during planning and prior to implementation.

The CFM and a Forum for Continuing Dialogue

The success of this training program will also be measured by how well it adapts to change and allows R.S.A.F. leaders to manage that change. As some of the most experienced R.S.A.F. leaders, Career Field Managers (CFM) are primarily responsible for implementing changes within the various career fields. Therefore, it is recommended that each CFM be responsible for developing, implementing and maintaining the CFETPs for their respective specialties. CFMs will communicate directly with weapons systems

managers and training squadron managers to disseminate R.S.A.F. and career field policies and program requirements.

This plan also calls for the establishment of Utilization and Training Workshops (U&TW) to ensure that the CFETP requirements are responsive to evolving R.S.A.F. needs. These workshops would encourage participation and input from field personnel, providing a valuable forum for CFMs to dialogue with those charged with directly supporting the R.S.A.F. mission. Such dialogue would also be useful in the development of the CFETP.

R.S.A.F.: On the Road to Independent Sustainability

In developing our approach to transforming the Royal Saudi Air Force into a self-sustaining organization, it is critical that we remember the role performance-based training plays. Its positive impact was evident during implementation of the R.S.A.F. Readiness Plan. As heir to the RRP, the Transformation Team approach derives its effectiveness in part from the small but well-trained core of R.S.A.F. officers that the RRP produced.

With this core in place, the R.S.A.F. is on its way to sustainability. To continue on this path, every effort should be made to fill all needed positions with Saudi Nationals. It may require moving personnel from the back shops but nothing should take priority over filling these positions. This commitment requires a process for back filling positions

which become vacant through attrition. In the early stages of implementation it may be necessary to double billet the most critical positions on the flight line. However, this would help maintain a continual supply of trained R.S.A.F. personnel to fill the positions and enable R.S.A.F. command to address surge requirements during increased flying activity.

Further, we recommend the R.S.A.F. choose one base and one squadron as a test case for this transformation approach. Strict discipline must be instilled in the airmen and it must be understood that when this process is completed, no augmentees will be there to assist in performing this critical function.

Since the 1980s, the Royal Saudi Air Force has been trying to wean itself off western technical support. Since then, significant strides have been made and there have been several setbacks. Each experience, whether good or bad, however, has offered an important learning opportunity. The Transformation Team concept, as outlined above, draws from all of these experiences. The result is a program that can and will work for the long-term independence and sustainability for the protection of the entire Kingdom.

As always, P.A.R.T.S. Inc. stands ready to assist the R.S.A.F. in refining and implementing the Transformation Team concept as deemed appropriate.