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ISSUE 5

STAR WARS™

# BUILD YOUR OWN X-WING



## A SUPERB MODEL OF LUKE SKYWALKER'S 'RED FIVE' STARFIGHTER

## ALSO INSIDE



CREATING A STARSHIP FLEET
**SET-BUILDING - PART 1**



STARFIGHTER ACES
**WEDGE ANTILLES**

DeAGOSTINI

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STAR WARS
BUILD YOUR OWN
X-WING


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While ILM was designing miniature model ships, most of the *Star Wars* story was going to be filmed with actors on sets built in the studio.

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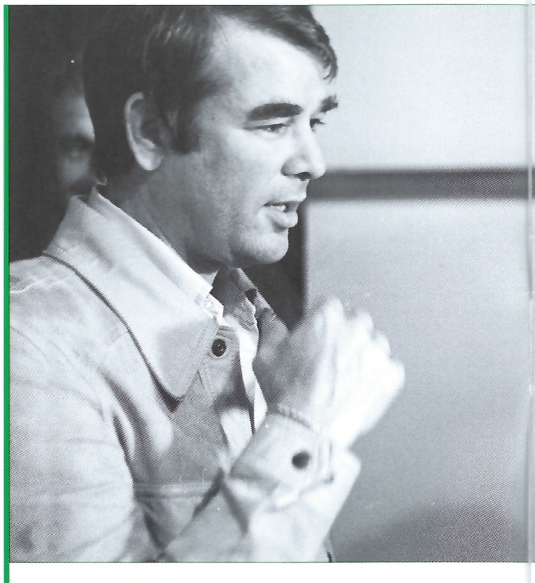
Rebel hero Wedge Antilles's path to joining the Alliance began with him being one of the best students at an esteemed Imperial academy…

## BUILD THE X-WING 10
COCKPIT SHELL, INSTRUMENTS AND ASTROMECH DROID (R2-D2)

This issue includes parts for the cockpit and the pilot's control panels, plus parts to make an extra leg for R2-D2 when he is out of the ship.




Much of the live action for *Star Wars* would be filmed in England. George Lucas recruited British technicians (L to R: Roger Christian, Les Dilley, John Barry, Bill Welch and Norman Reynolds), and based the team at Elstree Studios.



Alan Ladd Jr. (left) was instrumental in securing 20th Century-Fox's backing for George Lucas to make *Star Wars*. He already had experience of producing films in London before returning to the USA as Fox's Head of Creative Affairs.

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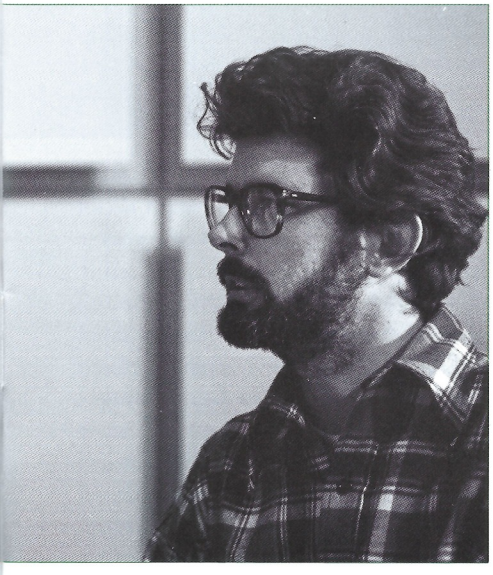

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# SET-BUILDING PART 1

## STARSHIPS IN THE STUDIO



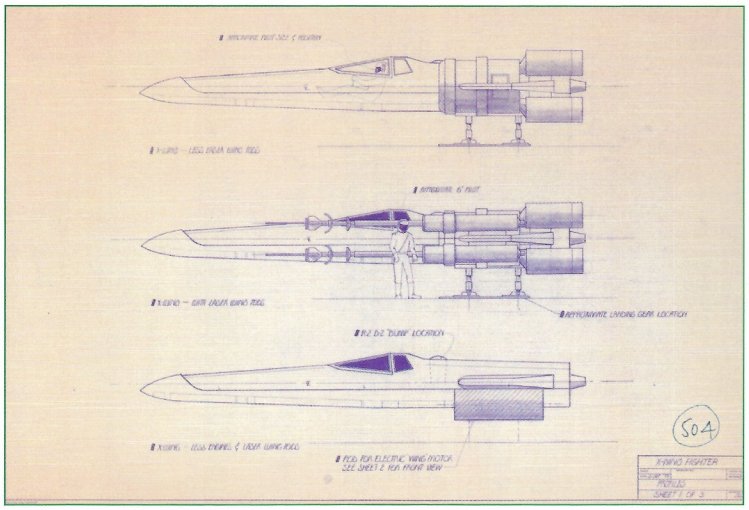
While Industrial Light & Magic was pioneering a new way to create the visual effects that would make scenes like the X-wings' attack run on the Death Star look real, most of the *Star Wars* story was going to be told with actors and conventional live-action filming. Some sequences could be shot on location, but most of the other-worldly scenery and fantastic starships would have to be created as sets, built in the studio.

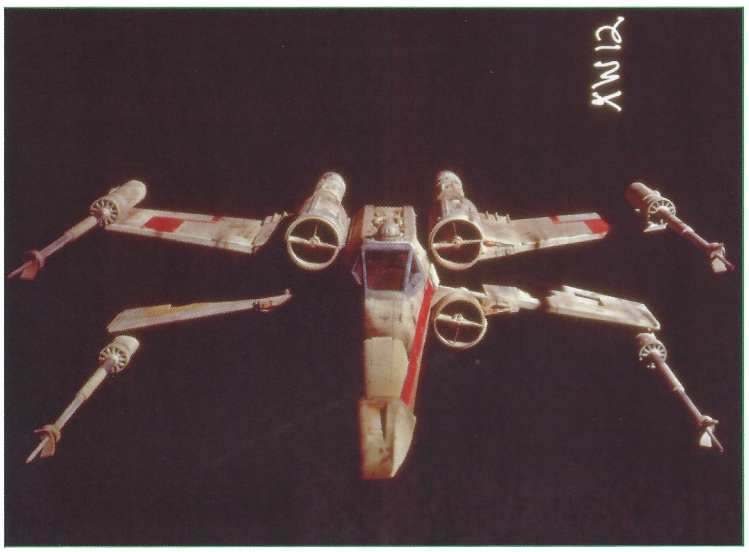
A key issue was to find facilities that could realise George Lucas's vision on the scale that was needed – at a price the production could afford. In 1975, Lucas and 20th Century-Fox, the studio that was to finance *Star Wars*, estimated how much profit the movie was likely to make, and worked back from that to decide on the budget. With hindsight, it may seem surprising that *Star Wars* was not expected to be particularly profitable, but at the time, it was viewed as a low-budget production. The ceiling on costs was set at just $4 million to cover all the sets, crew and expenses.

That ruled out working in Hollywood – which would have cost twice as much as that. Not being tied to the traditional studio system suited George Lucas, and it was suggested that he should look at working in England instead of the USA. Britain had plenty of facilities and highly experienced people, but as the home-grown movie industry was going through lean times, there were deals to be done.

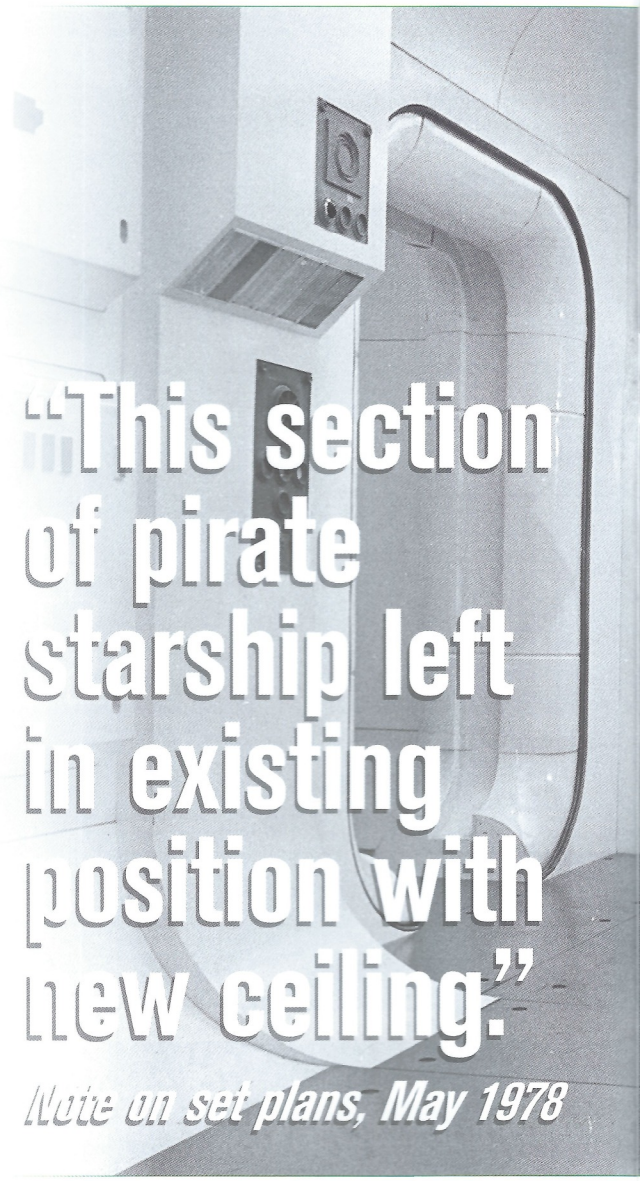
### BRITISH LINE-UP

Thus the production of *Star Wars* came to be based at Elstree Studios, just north of London, with British technicians appointed to key roles. They included Norman Reynolds, art director, Les Dilley, (who was initially signed up as assistant art director), John Barry, production designer, Roger Christian, set dresser, and Bill Welch, construction supervisor.





Industrial Light & Magic provided the British production team with the existing designs for the ships. In the case of the X-wing, this included sets of technical drawings (above) as well as a physical example of the filming miniatures (below).



"This section of pirate starship left in existing position with new ceiling."

*Note on set plans, May 1978*

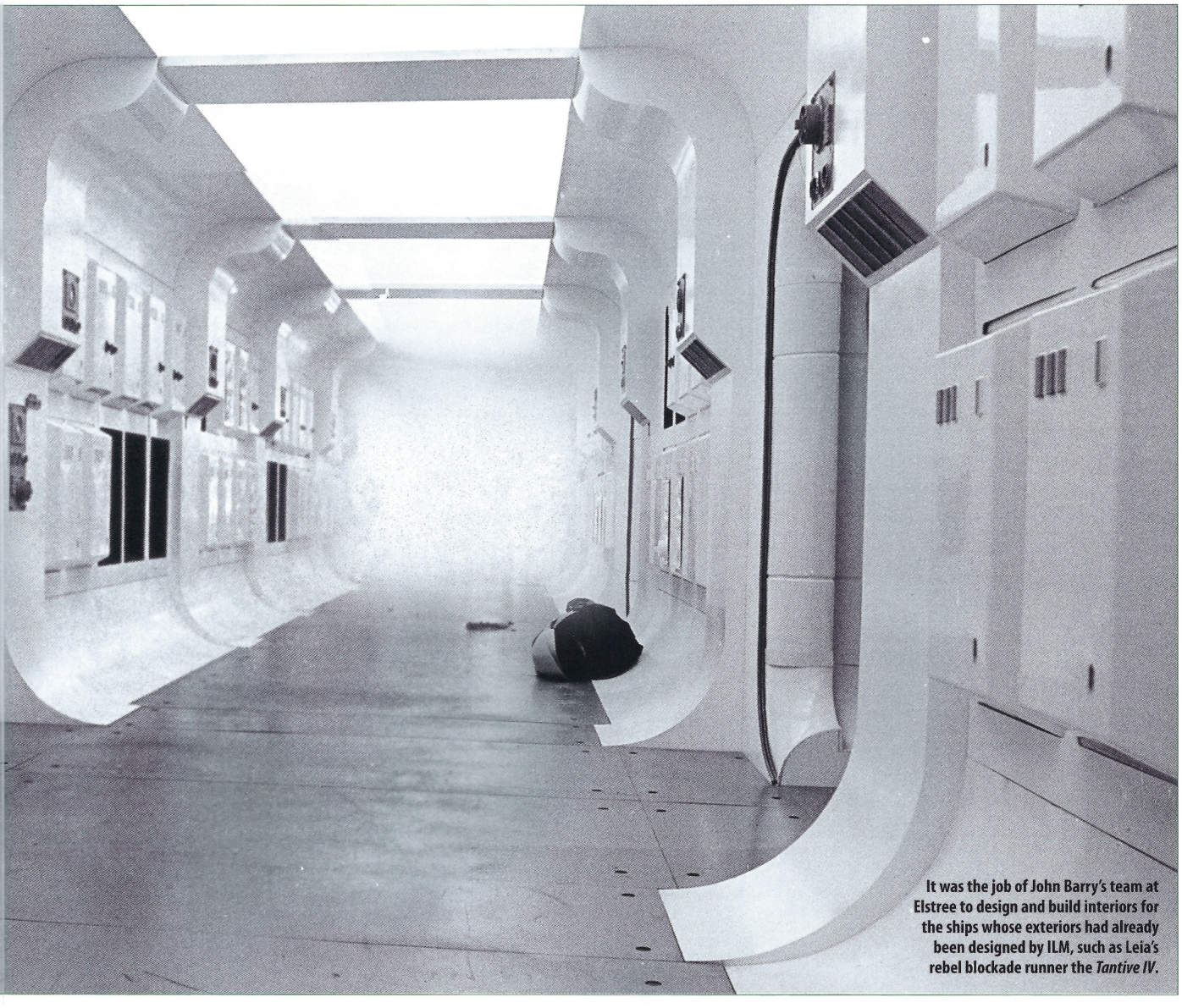
By the time Fox had given the green light to the production on 13 December 1975, the focus of design work had already shifted from California to Hertfordshire, where John Barry and his team were working on the interiors of the Death Star and Leia's ship, the Mos Eisley Cantina, the Lars homestead and other key areas where the tale would be told. Some of these settings had been partially visualised in Ralph McQuarrie's paintings, but others had to be invented from scratch – and in all of them, much of the detail was designed by Barry.

It was a different story for the ships and vehicles (including the X-wing), because most of these had already been designed by Joe Johnston and worked on by the model-makers at ILM. That meant that the British set designers would have to recreate them full-size for principal photography.

## RECREATING THE STARSHIPS

In the case of the X-wing, the key reference were the models themselves – plus a set of orthographic drawings produced by ILM's draftsman Steve Gawley back in October. The drawings and one of the models were sent to Elstree, where the art department produced its own blueprints from which to build the practical set. A similar process was used for all the other vehicles – after which photographs and drawings of the finished sets went back from Elstree to Van Nuys to ensure as much continuity as possible. One result of this process (and the fact that the material was reused to recreate the ships for *The Empire Strikes Back* and *Return of the Jedi*) was that some key drawings would be lost to the archive.

Practical and budget considerations meant compromises had to be made when building the sets – even for ships that were key to major scenes. In the case of the exterior of the *Millennium Falcon*, for example, it was only possible to build half of the ship – but it was filmed to look like the whole of it was

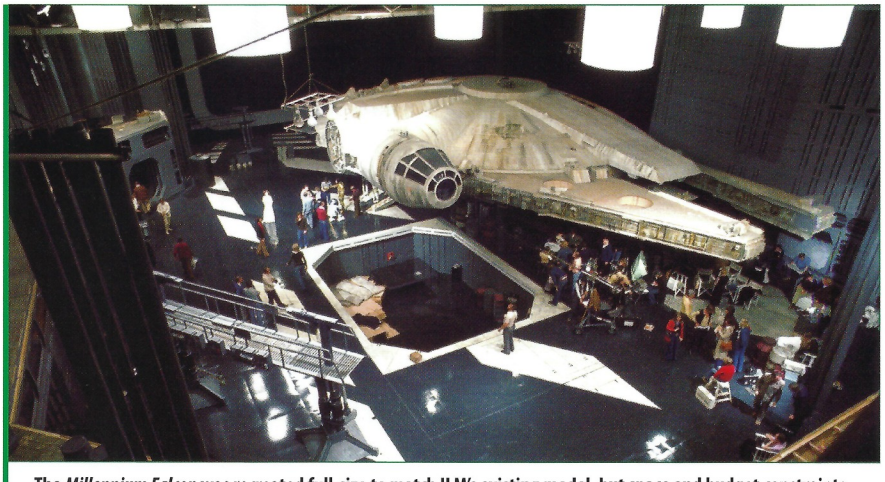


It was the job of John Barry's team at Elstree to design and build interiors for the ships whose exteriors had already been designed by ILM, such as Leia's rebel blockade runner the *Tantive IV*.

there, and the set was rebuilt around it for its appearances in Docking Bay 94 and the Death Star hangar.

The X-wings would have to appear in three key sequences: they are seen twice in the hangar where Luke and the other rebel pilots prepare for the battle (and Luke later returns); and also in close-up as the pilots make their attack runs. The first two of these scenes posed a practical problem because Elstree had no soundstage big enough to construct the cavernous rebel base. The crew was unable to secure permission to film in a real hangar, as they had wanted, so another solution had to be found…

*continued in Part 2*



The *Millennium Falcon* was recreated full-size to match ILM's existing model, but space and budget constraints meant that little more than half of the ship could be built in Elstree Studios, with the set changed around it to represent both the hangar and the docking bay. It would be a similar story for the X-wing.

# WEDGE ANTILLES

## DEFECTION OF AN IMPERIAL CADET

After his part in the Battles of Yavin, Hoth and Endor, Wedge Antilles would become one of the most celebrated Rebel Alliance starfighter aces. But his path to joining the Alliance was less well known. His story began with him being one of the best cadets at an esteemed Imperial academy...

**"The Empire hurt people close to me."**

*Wedge Antilles*

Wedge was a Corellian – like Han Solo, and many of the best pilots in the galaxy. Life was tough on Corellia, and while he worked as a farmhand in what little spare time he had, Wedge's main job was at a starship fuel depot. Although the job was dirty and hard work, Wedge learned a lot about starship maintenance, and he learned how to fly. Like other Corellians before him, being able to take to the sky was an escape – however temporary – from life's drudgery.

### TURNING POINT

#### CLASH WITH AUTHORITY

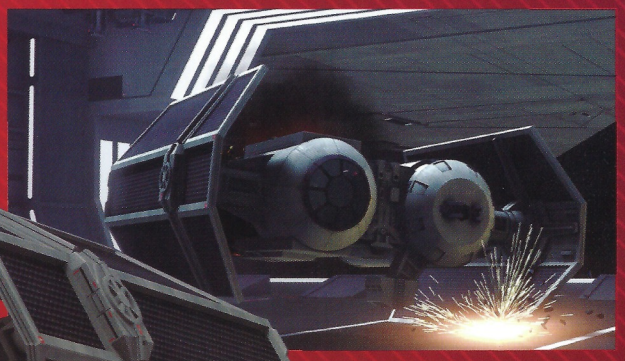
Captain Vult Skerris – an active fighter pilot and flight instructor at Skystrike Academy – was a cold-hearted and brutally efficient Imperial ace, who told Wedge that the price for showing mercy was death in combat. Skerris was proud of leading an assault on a rebel relief freighter heading for the starving people of Teralov, ruthlessly destroying the ship even after its crew surrendered. The incident became a turning point for Wedge and his friends Hobbie and Rake.

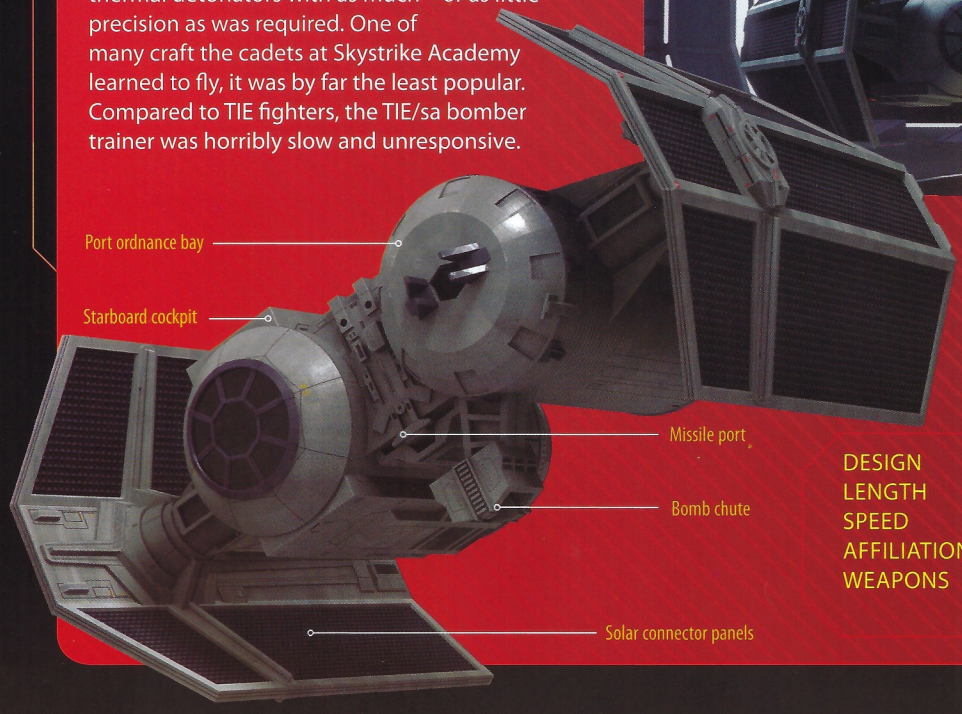


FLIGHT TRAINING

## TIE BOMBER TRAINER

The TIE/sa bomber was an essential part of the Imperial Navy, delivering heavy ordnance such as concussion missiles, proton torpedoes and thermal detonators with as much – or as little – precision as was required. One of many craft the cadets at Skystrike Academy learned to fly, it was by far the least popular. Compared to TIE fighters, the TIE/sa bomber trainer was horribly slow and unresponsive.



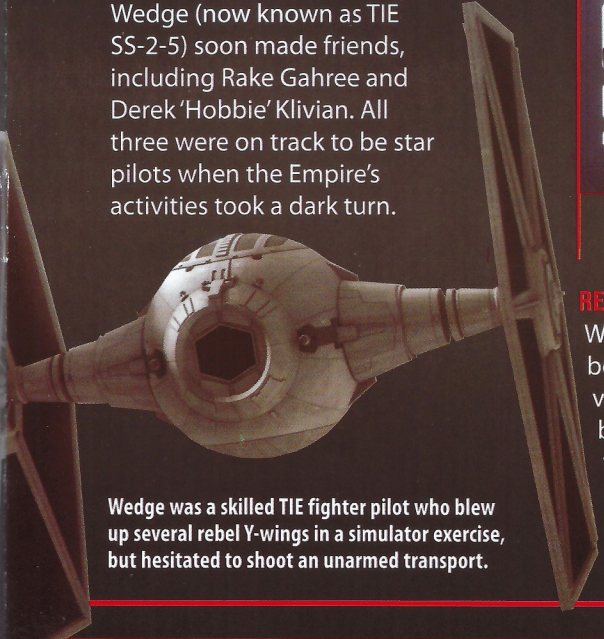



**Wedge was able to put his training to use when he rebelled against the Empire, commandeering one of the cumbersome TIE bombers to make good his escape from Skystrike Academy.**

| | |
|---|---|
| DESIGN | Sienar Fleet Systems |
| LENGTH | 7.9 metres |
| SPEED | 850km/h |
| AFFILIATION | Galactic Empire |
| WEAPONS | Laser cannons, various heavy ordnance |

### THE IMPERIAL ACADEMY

Imperial recruitment offered a way to keep flying, and Wedge's considerable natural talents soon saw him moved to the elite Skystrike Flight Academy, based on a huge repulsorlift platform in the skies of Montross. Wedge (now known as TIE SS-2-5) soon made friends, including Rake Gahree and Derek 'Hobbie' Klivian. All three were on track to be star pilots when the Empire's activities took a dark turn.



**Wedge was a skilled TIE fighter pilot who blew up several rebel Y-wings in a simulator exercise, but hesitated to shoot an unarmed transport.**



**From his early days at the prestigious Skystrike Flight Academy, Wedge's friends included Rake Gahree and Derek 'Hobbie' Klivian, who came to share his distaste for the Empire.**

### REBEL SYMPATHIES

Wedge had learned that his friends and family back on Corellia were being directly harmed by the Empire's increasingly oppressive and violent actions. He was already considering leaving the Imperial Navy by the time his instructor Vult Skerris committed what amounted to a war crime. Wedge knew that Hobbie and Rake shared his views, and after the massacre at Teralov, all three decided to defect to the rebellion. When Wedge reached out to rebel sympathisers, his message found its way to Agent 'Fulcrum' – a code name shared by



Investigating a growing rebel insurrection, Lothal Governor Pryce and ISB Agent Kallus travelled to Skystrike Academy to seek out the defectors.

the rebellion's best agents – who organised for the Phoenix rebel cell to send in Sabine Wren. She had attended the Imperial Academy on her homeworld of Mandalore, so knew how not to draw attention to herself. Wren made contact with Wedge at Skystrike, and they made their plans to escape.

### ESCAPE BID

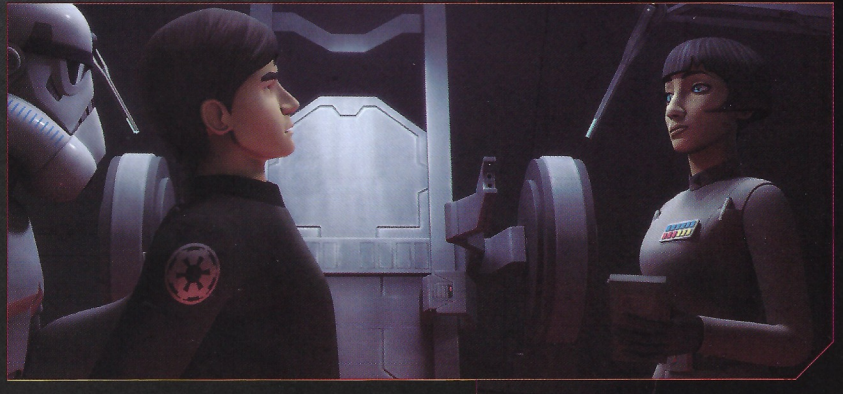
The arrival at Skystrike Academy of rebel hunters Governor Pryce of Lothal and Imperial Security Bureau Agent Alexsandr Kallus forced Sabine and the others to make their move quickly. On a training run in unarmed TIE fighters, they abruptly broke off and fled for a waiting rebel cruiser, but the attempt ended in

When Governor Pryce and Agent Kallus arrived to investigate the cadets' loyalty, Antilles was ready to follow Sabine and join the rebels, despite the risks.

## CAUGHT IN THE ACT

### PRYCE'S TRAP

Sure that one or more of Skystrike's trainee pilots were about to defect to the rebellion, Governor Pryce and Agent Kallus worked with Academy leader Commander Goran to sabotage their ships. When Wedge and his friends tried to escape, Pryce simply pressed buttons and blew the solar panels off their TIE trainers, crippling the fighters in space.



TECH / EQUIPMENT



TIE pilot uniforms emphasized their role as tools of the Empire, entirely hidden by their black jumpsuits and sealed helmets.

## TIE FIGHTER HELMET

The entire TIE-series (with the exception of special craft made for Darth Vader or the Inquisitorius) were built without shields and full life-support systems. As a result, cadets had to get used to the helmets and chest packs they were compelled to wear every time they flew the craft. The helmets provided a supply of oxygen in emergencies, and tied in to their ship's systems to feed the pilots vital tactical information across their visor.



TIE pilots wore an emergency atmospheric unit control box on their chest, attached to two flexible gas transfer tubes that plugged into the helmet.

failure. The TIEs were sabotaged by remote control, and armed TIEs drove off the rescue ship.

### LAST CHANCE

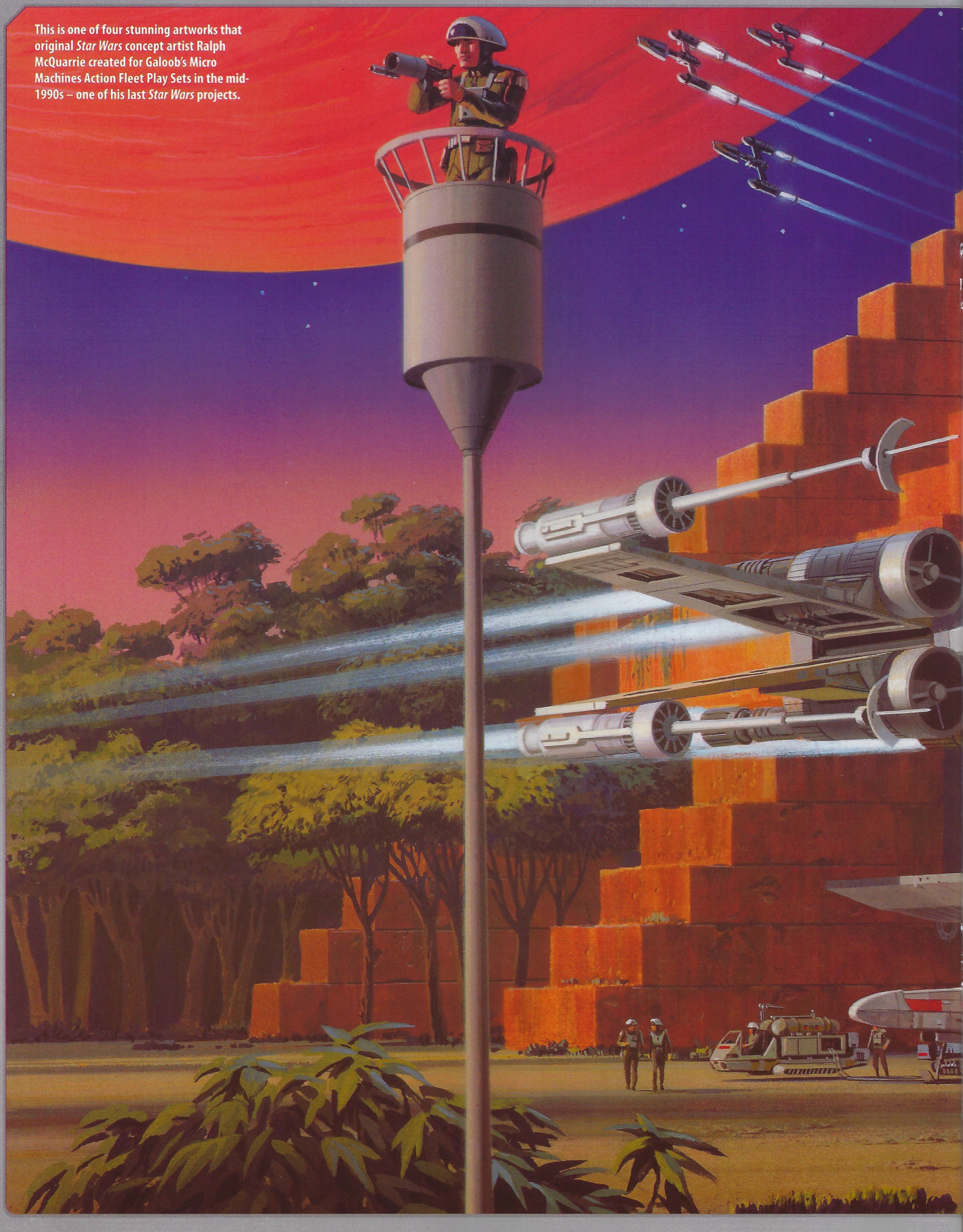
Rake was blown up with his ship as an example to others, while the remaining three were taken prisoner. Hobbie and Wedge were thrown into a cell together, but when Sabine was taken for interrogation, she managed to escape and free her new friends. Together, they stole a TIE/sa bomber trainer, and Wedge did what he could to coax the best possible performance from the bucket of bolts, but Captain Skerris quickly caught up and peppered the ship with laser fire. Fortunately, the rebel ship flew to the rescue at the last minute, blocking fire that would have destroyed Wedge, Hobbie and Sabine.

**"Welcome to the rebellion."**

*Commander Jun Sato*



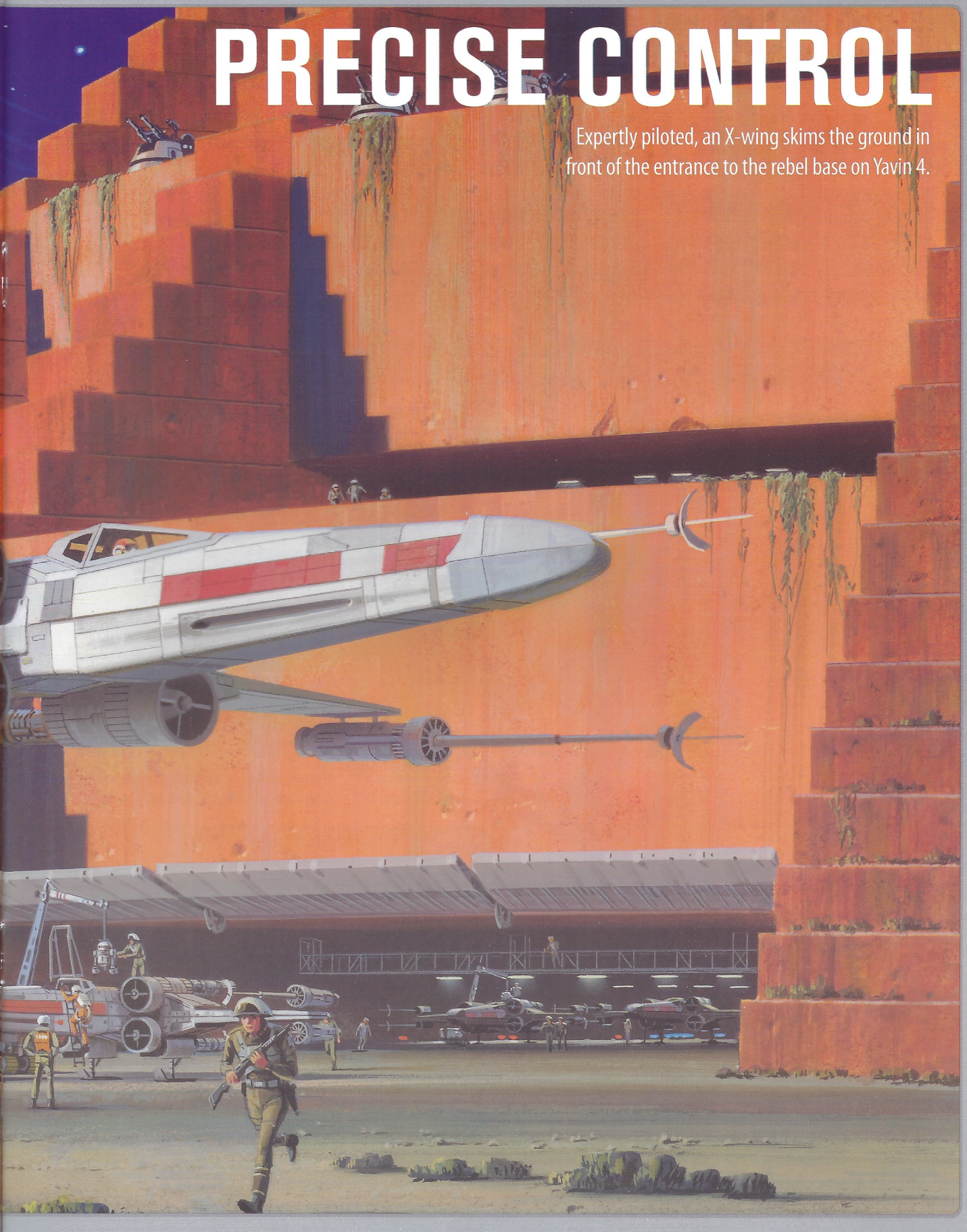
Rescued by the rebels, Wedge and Hobbie were greeted by Commander Sato – leader of Phoenix Squadron – at the base on Atollon, their new home.



This is one of four stunning artworks that original *Star Wars* concept artist Ralph McQuarrie created for Galoob's Micro Machines Action Fleet Play Sets in the mid-1990s – one of his last *Star Wars* projects.

# PRECISE CONTROL

Expertly piloted, an X-wing skims the ground in front of the entrance to the rebel base on Yavin 4.

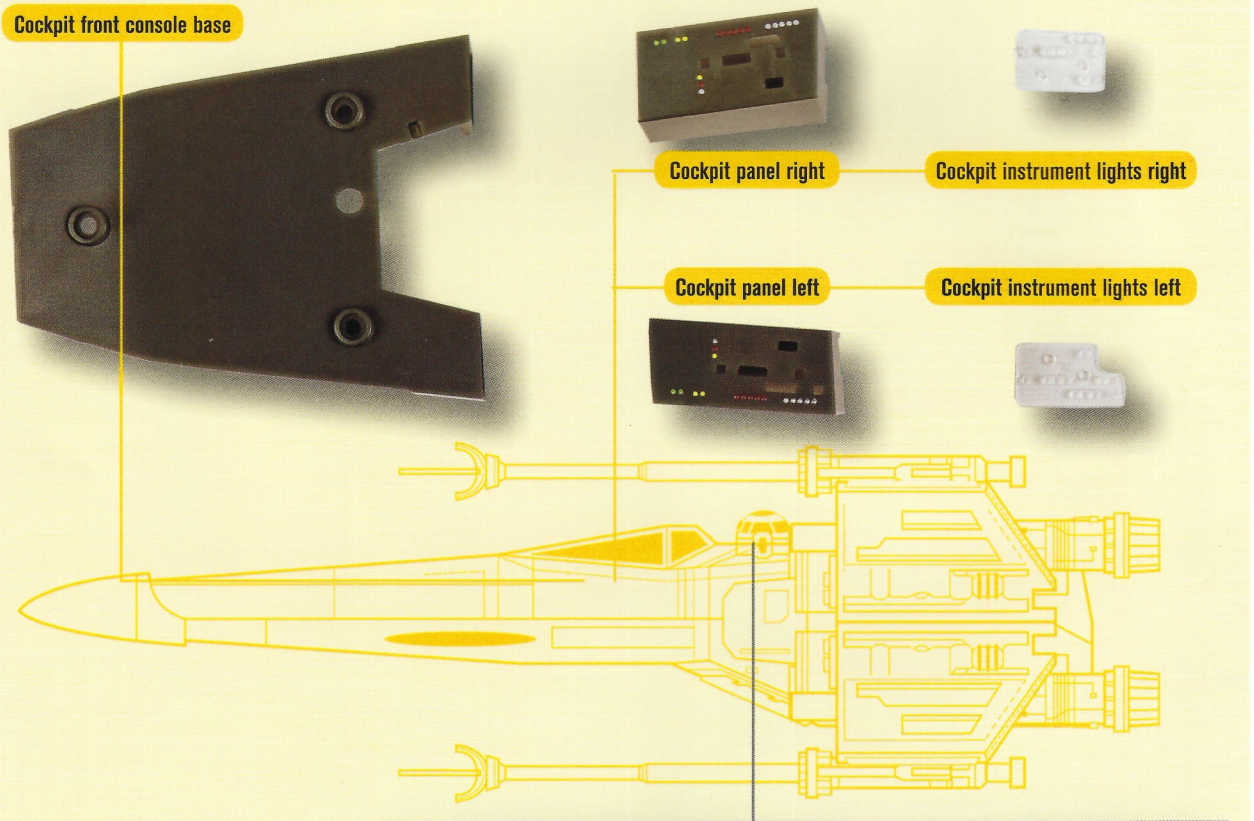


# Cockpit instruments and astromech droid (R2-D2)

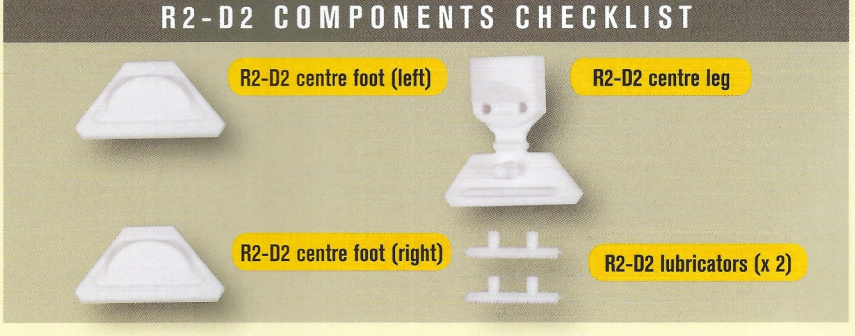
**This issue includes first sections of the instrument panels that surround the pilot, together with the transparent lenses that provide their illumination. You also have the parts to make R2-D2's third (centre) leg, which can be fitted when he is removed from the droid socket, covering the spindle that makes his head turn.**

## COMPONENTS CHECKLIST

Use this guide to check what parts you have received and where they fit on the model

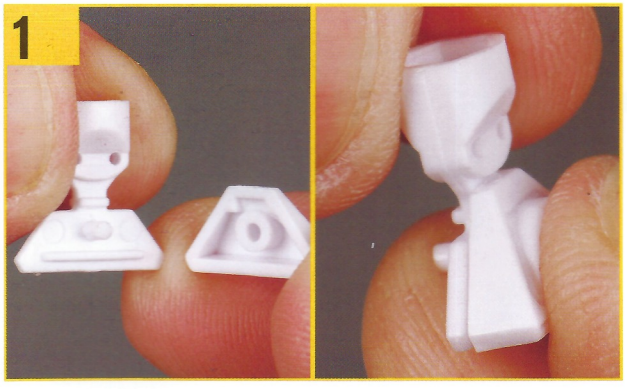



## R2-D2 COMPONENTS CHECKLIST

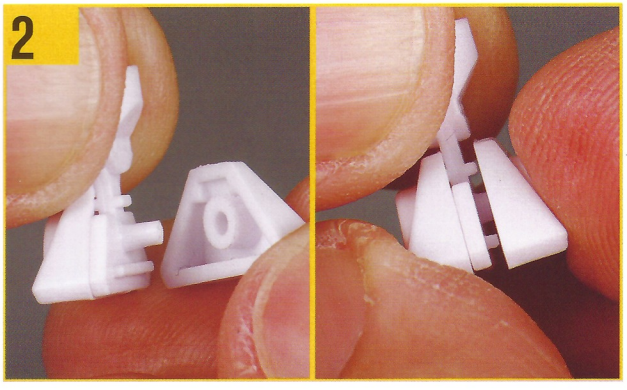


# R2-D2'S CENTRE LEG

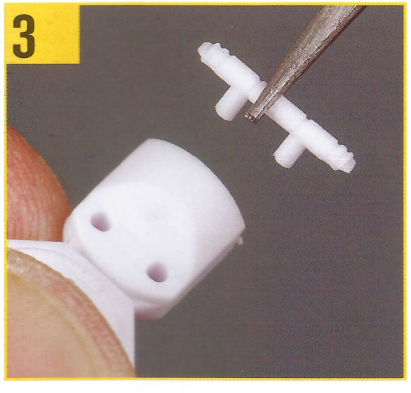
**Assemble all five pieces supplied to make an optional extra for the completed R2-D2, being careful not to lose the small parts – especially the lubricators.**



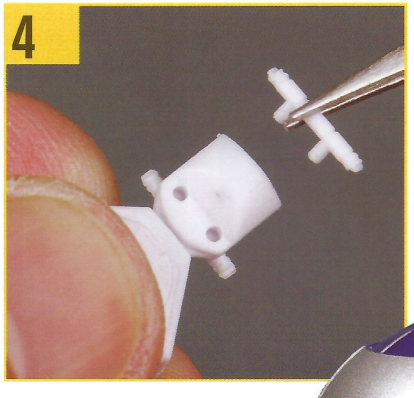

Fit the hole in the left half of R2-D2's foot over the pin protruding from the centre leg, and press it firmly into place.



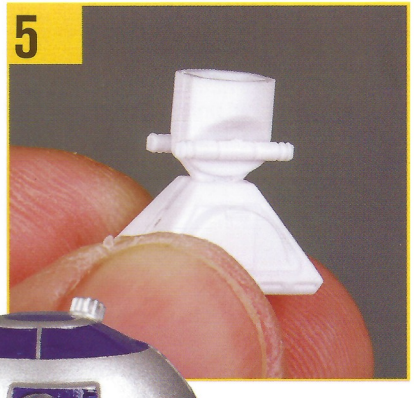

Repeat Step 1 to fit the other half of R2-D2's foot.



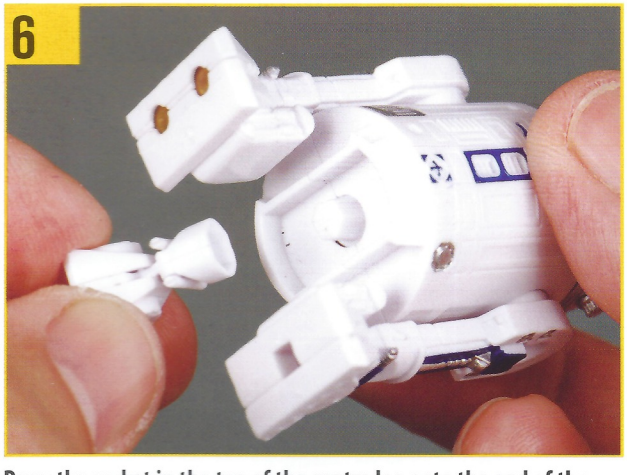

Use tweezers to fit the two pins on one of the lubricators into the holes in the ankle.




Repeat Step 3 to fit the second lubricator.




The result should look like this.




Press the socket in the top of the centre leg onto the end of the spindle underneath R2-D2's body. (Note, the leg will turn with R2-D2's head, so align this pointing forwards.)

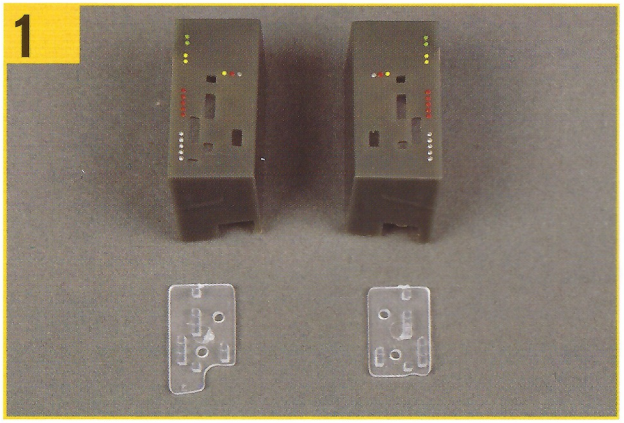


The completed foot fitted to R2-D2.

# FITTING THE INSTRUMENT PANELS

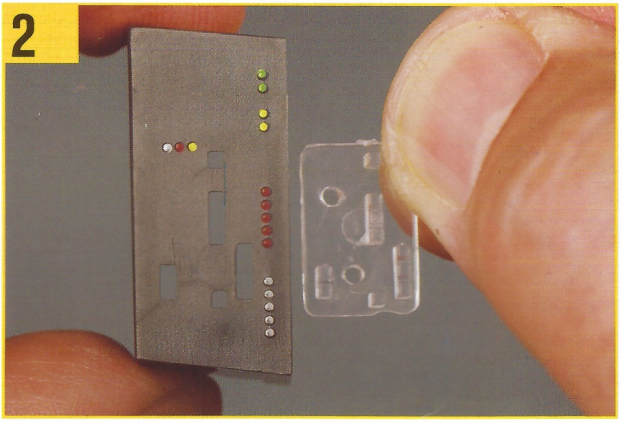
**The left and right cockpit panels and the lenses that make the instruments light up are installed at this stage – but keep the forward console base until later on.**

1



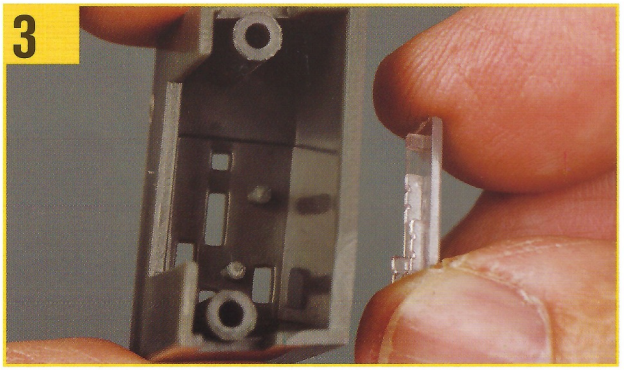
Lay out the left and right cockpit panels and the two clear lens panels, which go this way round.

2



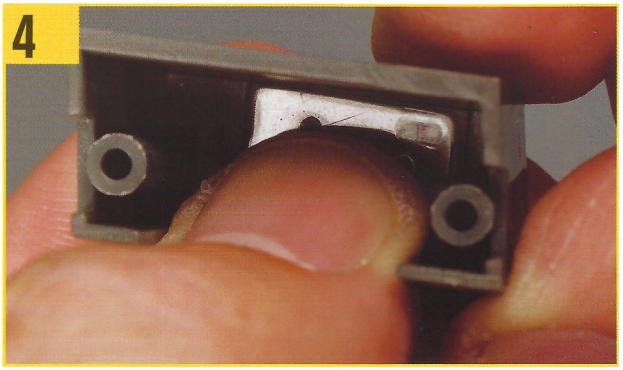
Start with the right-hand panel, matching up the mouldings on the lens with the holes for the instruments.

3



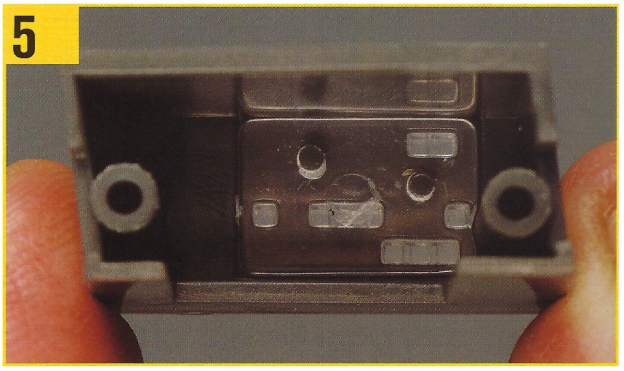
There are two pins on the inside of the panel that match the holes in the lens moulding.

4



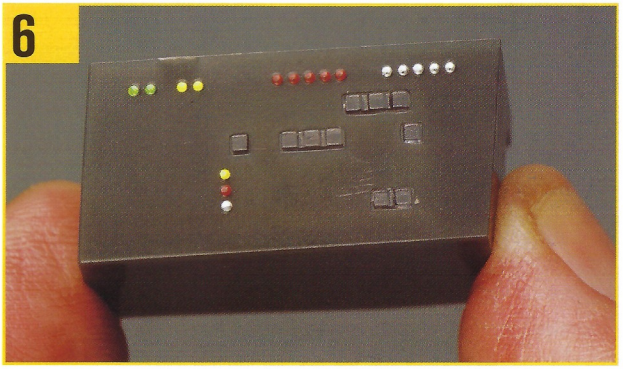
Press the panel onto the pins…

5



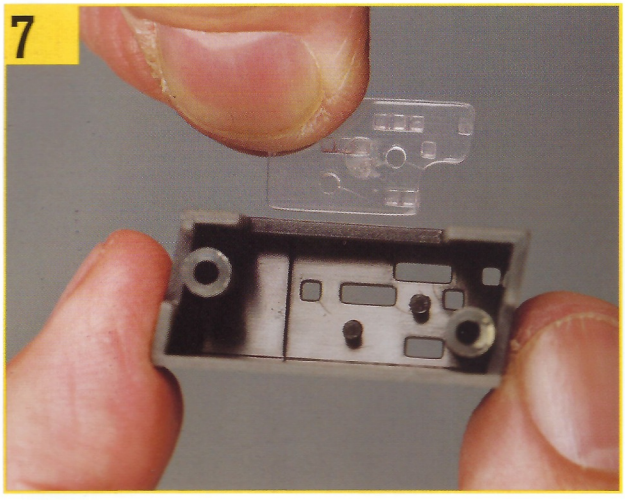
… so it looks like this on the inside…

6



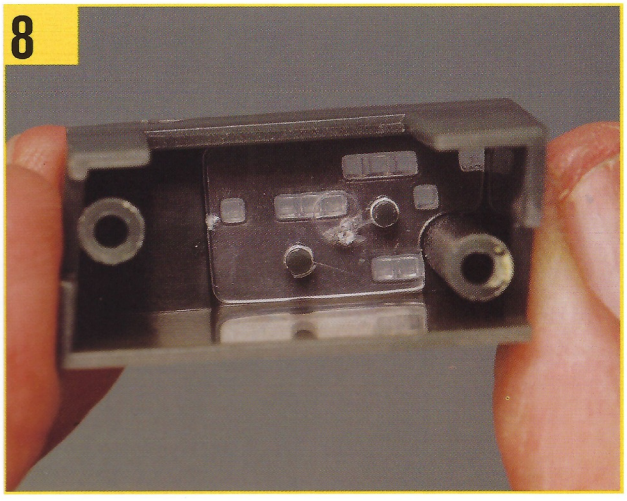
… and outside.

**7**



Repeat the process to fit the second set of lenses onto the two mounting pins inside the right-hand panel…

**8**



… so the assembly looks like this.

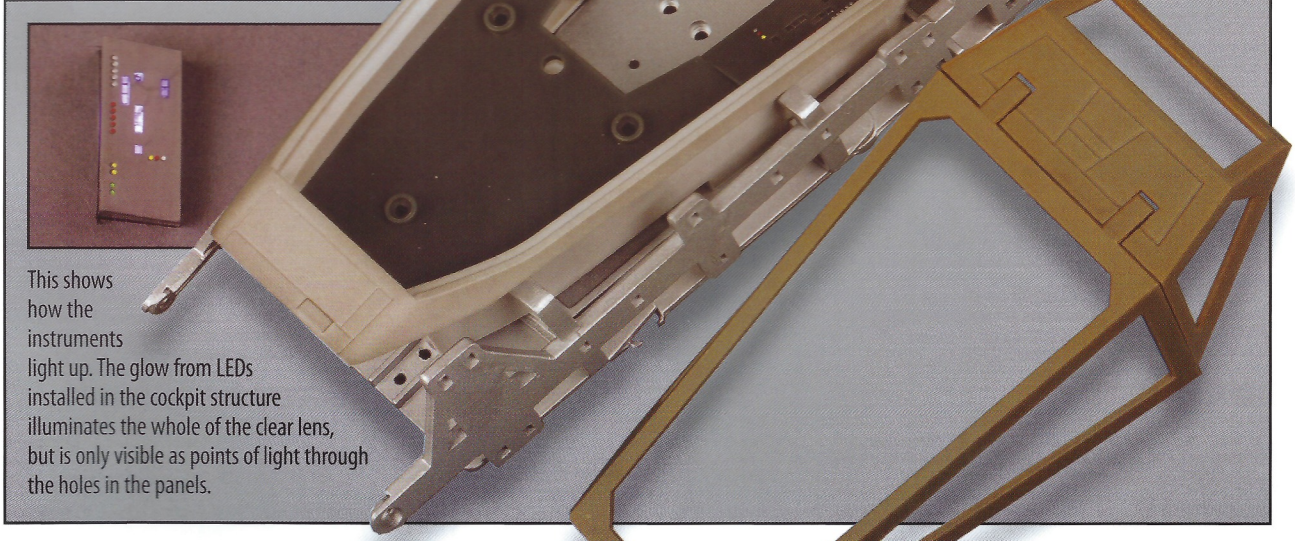
**9**



That completes the two side panels, which you will fit in the next issue.

## Expert Tip

This view skips ahead to Issue 6 to show you how the panels fit into the cockpit shell. We've also placed the shell inside the metal framework that you put together in Stage 4 and positioned the cockpit canopy alongside. Don't miss the next stage of the build!



This shows how the instruments light up. The glow from LEDs installed in the cockpit structure illuminates the whole of the clear lens, but is only visible as points of light through the holes in the panels.

# DON'T MISS OUT!

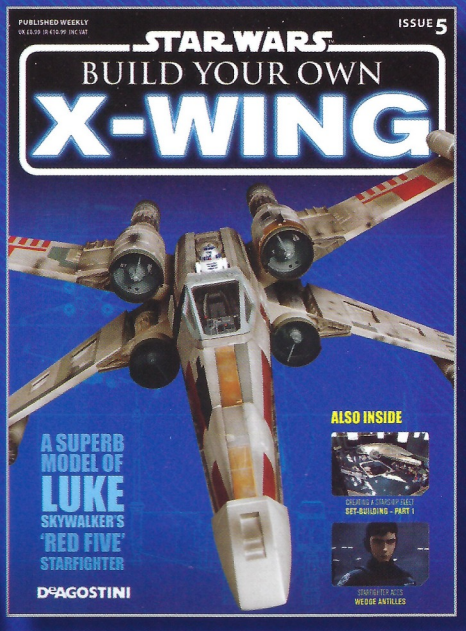
## ISSUE 5

Creating a Starship Fleet
Set-Building - Part 1

Starfighter Aces
Wedge Antilles

R2-D2's
centre leg
Instrument panels
Instrument
lighting displays



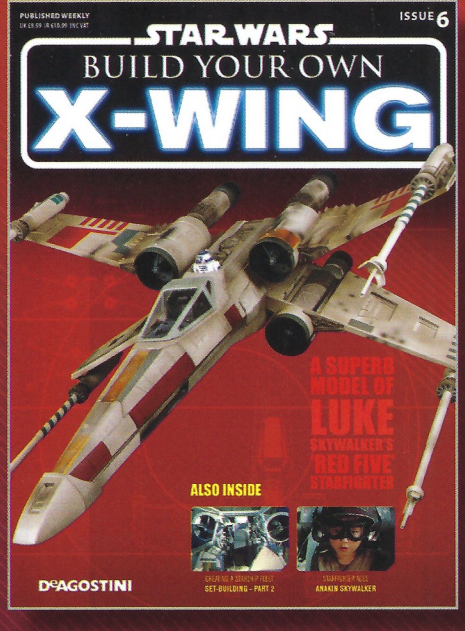


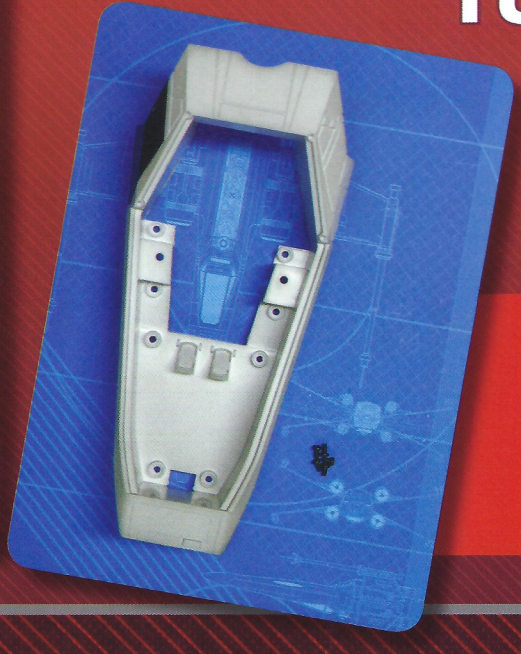

## ISSUE 6

Creating a Starship Fleet
Set-Building - Part 2

Starfighter Aces
Anakin Skywalker

Cockpit base
and screws



Items may differ from those shown.

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